REPORT RESUMES

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SOUTHERN CALIFORNIA AUTOMATED CATALOGING PROJECT. FINAL REPORT.
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UNIVERSITY OF SOUTHERN CALIFORNIA, LOS ANGELES
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THE FEASIBILITY OF ESTABLISHING A CENTER FOR PREPARING INSTRUCTIONAL MATERIALS CATALOGS FOR ORGANIZATIONS IN EIGHT COUNTIES OF SOUTHERN CALIFORNIA WAS STUDIED. TO DETERMINE THE PROBLEMS AND COSTS INVOLVED, STANDARDS WERE DEVELOPED FOR INPUT OF MATERIAL THAT COULD BE USED IN A COMPUTER, PAGE LAYOUTS FOR A CATALOG WERE DESIGNED, A NUMBER OF CATALOGS WERE CONVERTED FOR COMPUTER PRINTOUT, AND THE CATALOGS WERE REPRODUCED AND DISTRIBUTED. RESULTS OF THE STUDY INDICATE THAT THE ESTABLISHMENT OF A CATALOG CENTER IS FEASIBLE. THE CONCLUSIONS DRAWN WERE THAT THE SYSTEM COULD BE USED ON A NATIONWIDE BASIS AND OTHER CENTERS SHOULD ALSO BE ESTABLISHED FOR PREPARATION OF INSTRUCTIONAL MATERIALS CATALOGS AND FOR PREPARATION OF LOCAL LIBRARY CATALOGS. THE REPORT INCLUDES FLOWCHARTS FOR UPDATING MASTER FILES AND FOR COMPUTER PRINT PROCEDURE. A PERT DIAGRAM ILLUSTRATES THE COMPLETE CATALOG PRODUCTION PROCESS. (AL)

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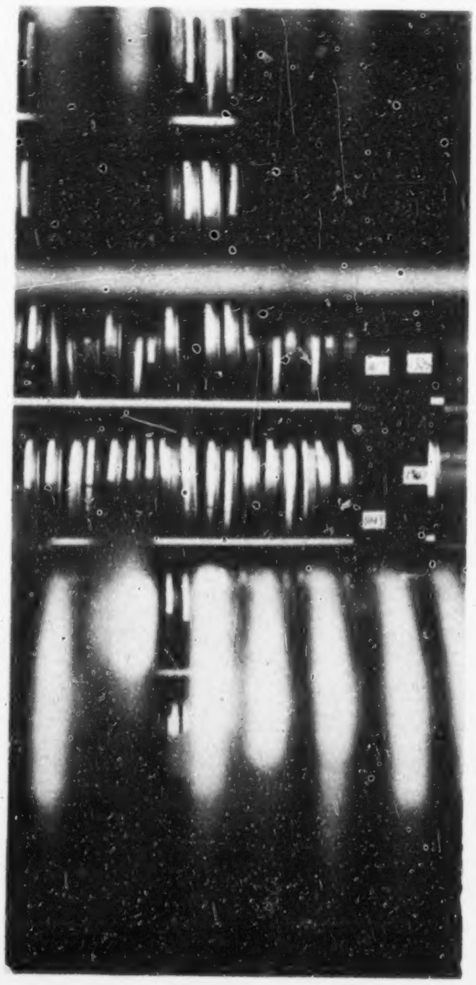

a/c
southern california
# automated cataloging

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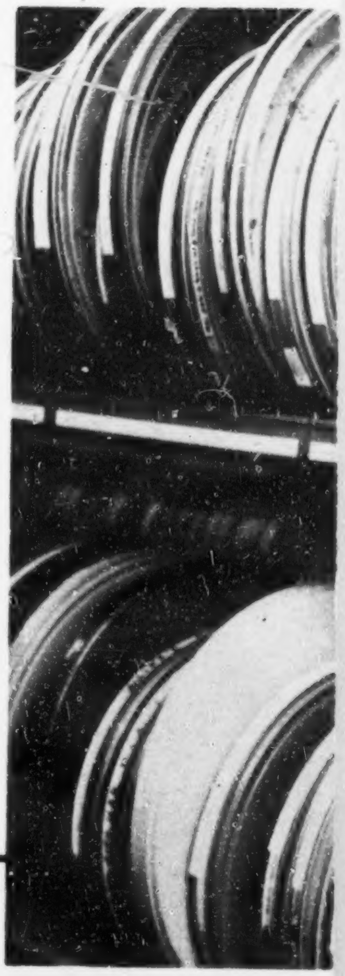

SOUTHERN CALIFORNIA AUTOMATED CATALOGING PROJECT. FINAL REPORT.

Contract No. OE-4-16-031

GLENN McMURRY

October 1966

The research reported herein was performed pursuant to a contract with the Office of Education, U. S. Department of Health, Education, and Welfare. Contractors undertaking such projects under Government sponsorship are encouraged to express freely their professional judgment in the conduct of the project. Points of view or opinions stated do not, therefore, necessarily represent official Office of Education position or policy.

UNIVERSITY OF SOUTHERN CALIFORNIA

Los Angeles, California

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AUTHOR'S NOTE

This report has been written to give the reader an overall impression of the Southern California Automated Cataloging Project. In a sense, it is another progress report. The University of Southern California started experimenting with computerized cataloging techniques before the "Feasibility Study" was funded by the Office of Education and is still carrying on the work, although the two-year study is completed. This work continues to increase in scope and depth; therefore, computer programs must be changed to reflect these improvements.

Duplicate copies of the basic computer programs, i.e., maintenance and printout programs, as they were being used at the close of the project, are available from the Office of Education on a cost basis. Other more current programs and details for participating in this on-going work may be obtained by writing directly to the University of Southern California, A/C Service, Cinema Division, School of the Performing Arts, University Park, Los Angeles 90007.

Glenn McMurry

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I. INTRODUCTION

Instructional material centers are established to supply to the teaching staff and curriculum planners, those actual or near actual life experiences needed to reinforce the student's learning situation. These experiences have, over the years, been provided by various media, such as, tape, disc and video recordings, models, mockups, and a host of other materials.

Research continues to prove that learning by the student takes place quicker and is retained longer by him when the learning situation is reinforced by integration of the actual or near actual life experience at the precise psychological moment. This moment is determined by the needs of the student within the learning situation itself. Curriculum committee and teachers try to anticipate these needs by constant study and long range planning.

The ability of the instructional materials center to supply the necessary learning experiences at the precise time is related directly to the physical set-up and the administration of the center itself. This paper is concerned with the instructional materials center and the problems it faces in carrying out its role in the learning process.

Problem

How then, does an instructional material center which has been given the responsibility to book, ship, receive and store materials, approach the problem of distribution in order to obtain the effective results demanded of it? With the ever increasing volume of materials, the problem has become monumental and most present systems have become outmoded. The problem of distribution at the moment is actually five separate problems: 1. The evaluation, purchase and physical handling of the materials; 2. The utilization of the material at the point of use, including the physical problem of projection; 3. The keeping of accurate records on the use of materials; 4. The maintenance of an accurate inventory; 5. The dissemination of information about instructional materials that are available.

The Southern California Automated Cataloging Project is concerned with the last three of these problems, and has placed the most emphasis upon the dissemination of information about instructional materials that are available.

In 1958 and early 1959, some work had been done in the U.S.C. Cinema Department utilizing the data processing techniques for producing listings of motion pictures produced and distributed by the University. (See Appendix A-1.) The short-comings of a card system were recognized early as an eighty column, or space, card simply is not large enough to hold the data and coding needed to allow for adequate sorting. Therefore, a system utilizing a computer was devised. Areas were assigned on the tape record to accommodate the film title, running time, annotation, etc.

In the past decade, the electronic computer has become an accepted fact. Its ability to store and retrieve information is uncanny. Book libraries have successfully utilized the computer in their work, so the question is asked, "can't non-book libraries do the same?" The answer, of course, is that they can but what group is going to set the standards for non-book materials so that computers can handle them?

Before a computer can be used effectively and efficiently, some agreement is necessary concerning the data: what constitutes a title? How long is the film or filmstrip? What length should be allowed for good reduction printing? Some standardizing must exist across the field in order for organizations to be able to accept the data collected. Furthermore, in-as-much as the interest in the use of data processing and computer equipment is growing, state-wide acceptance or even nation-wide acceptance of standards would be desirable.

Purpose

The purpose of the project is: to investigate the feasibility, problems, costs and details related to the establishing, for use in the eight counties in Southern California, an automated cataloging service concerned with audio-visual materials; to compare a computerized cataloging service with alternate types of cataloging; and to report the study in such a way that interested persons throughout the United States can determine the practicability of computerized cataloging to their own needs.

II. METHOD

The first step was to refine U.S.C. catalog materials that has been previously stored on tape. Then the materials were checked against those of other schools adding those that were missing from the tape. During this process, format and the definition of terms were altered and refined.

At one point, it was decided toutilize a serial number for each title and have organizations select their titles by a "mark sensing" technique similar to that used in testing. (See Appendix A-3.) This was soon discarded in favor of a more direct and simple method of marking directly upon computer print-out. All serial numbers have subsequently been eliminated in favor of the later system.

The procedure now used is as follows: (See Appendix A-4.) 1. A master print-out of all titles on the tape is sent to the user. (See Appendix A-5.) 2. The user checks each title on the list that he wants to have in his catalog. 3. To the left of the title he adds any rack or call numbers and the grade level that he wishes to assign to that title. To the right of the title, he indicates the stock (color or black and white) and the track. In the case of a motion picture this means silent or sound. (See Appendix A-6.) In the case of filmstrips, this means record, tape, script or captions. 4. Any titles that are missing from the list are reported on special forms which are returned to the U.S.C. cataloging service for processing. (See Appendix A-7.) 5. Call-cards are then prepared either by the user or by the U.S.C. service center. (See Appendix A-8.) 6. Data concerning the missing titles is researched and punched into new records which are merged onto the master tape. 7. Matching call-cards for the new titles are made. 8. All call-cards are alphabetized into one master file. 9. A control card or lead card is prepared which directs the computer to print out the material in the format desired by the user. (See Appendix A-9.) 10. These call-cards with an appropriate computer program are run against the master file and a two column, paged, alphabetical listing is prepared. This print-out can be photo reduced and printed to produce a catalog. (See Appendix A-10.) 11. Subject matter heading cards and the appropriate number of call-cards are punched by either the user or the project staff. (See Appendix A-11.) 13. The call-cards are filed by hand behind the appropriate subject matter heading cards. 14. A control or lead card is prepared which directs the computer to print out the material in the form desired by the user. 15. The subject matter deck with an appropriate computer program is run in the computer and a two column, paged, print-out is prepared. This print-out can be photo reduced and printed to produce the subject matter listing. (See Appendix A-12.) 16. During the course of processing the alphabetical listing, the computer makes a complete analysis of each producer, distributor and production credit code and punches a deck of cards representing each code used in the listing. 17. A control or lead card is prepared which directs the computer to print out the material in the form desired by the user. 18. These producer code cards with an appropriate computer program are run against the deck of producer code cards collected during the course of the project and matched with them to prepare a two-columned, paged listing of the codes and their meanings, with or without addresses of the producers and distributors. This print-out can be photo reduced and printed to produce the producer code listing or a catalog. (See Appendix A-13.)

Other intermediate steps to the above have been omitted in order to simplify the statement of method. Certain checks such as alphabetical order checks (four-field-compare) and omission checks would normally be included. (See Appendix A-14.) Additional uses for the call-cards would not normally be scheduled within the early conversion procedures. (See Appendix A-15.)

The steps for preparing catalogs vary depending upon the school's needs. An attempt is made to detail these steps as accurately as possible. (See Appendix A-25.)

III. RESULTS

The Southern California Automated Cataloging Project has established the standards for computerized cataloging not only for the eight Southern California counties, but for the entire state. 1. Guidelines have been published which give the producer a handbook from which to prepare data about his films which can be entered on the master file. 2. As a result of the project, the original U.S.C. file has been increased from approximately 1500 records to over 20,000 records making it the largest file of its kind in existence. Programs for maintaining and utilizing the file have been developed which will permit constant updating of the file and varied formats for organizational catalogs. (See Appendix A-16.) A number of functional catalogs have been produced for organizations utilizing the computer prepared print-out and they are in the field being used. (See Appendix A-17.) And, finally a newsletter has been published on a periodic basis which keeps its readers aware of developments in the center's activities and announces the releases of new materials by the cooperating producers of audio-visual materials. (See Appendix A-18.)

1. Guidelines To Audio-Visual Cataloging By Means Of Data Processing*
   *Available on request from: California Department of Education, Sacramento, California

2. Producer's Input Guide*
   *Available on request from: Automated Cataloging Service, U.S.C., Division of Cinema Film Distribution, University Park, Los Angeles, California 90007

IV. DISCUSSION

The feasability of establishing a center became a question of acceptance. Therefore, a product upon which an organization could pass judgment was delivered to them in the form of print-out for in-house reduction printing, or in the form of completed catalogs.

Advisory Board

An advisory board consisting of representatives from various types and sizes of organizations throughout Southern California was appointed by the president of the Southern Section of the Audio-Visual Education Association of California. This board met periodically to discuss the problems which the project staff encountered. Among the first of these problems which the project staff encountered, was the need for acceptable standards for dealing with biographical data about the materials and, second, an acceptable format for computer print-out.

After several sessions, it was agreed that the project effort, to be lasting and effective, must have more than local or regional support in regards to standards. Therefore, a state-wide approach was considered.

State Standards

The California Department of Education, Bureau of Audio-Visual, became interested in the Southern California project and suggested a state-wide meeting to hear a presentation by the project staff, outlining the recommended standards for utilizing data processing techniques to instructional materials cataloging. The delegates at the conference in

San Francisco numbered well over a hundred Audio Visual administrators from throughout the state. Their acceptance of the Southern California recommendations were unanimous with only slight changes and as a result, the State Department published the, "Guidelines to Audio Visual Cataloging by Means of Data Processing."

Input Standards

Standards for receiving input from the producers of audio visual materials were established and terms defined shortly after the San Francisco meeting. A letter, including a copy of the first draft of the "Producers Input Guide" and several report forms, were sent to all major producers of instructional materials and many of the non-majors. The acceptance of the input guide was gratifying. Soon many new items were being reported to the project staff which fulfilled the need to "start where we were" with all new releases for the year of 1964.

In keeping with the plan as outlined in the contract, motion pictures were considered first. Filmstrips took a close second consideration. The experience gained in motion pictures, however, set the pattern for all other media utilizing the system.

From this point on, the project became one of hard work, "debugging" of programs and "selling" the automated cataloging idea. For, unless the programs worked and the actual jobs could be completed, user acceptance could not be evaluated. Therefore, those organizations with cataloging problems or special needs were accepted. And, this is a never-ending task. All organizations seem to have unique problems and special needs.

Computer Configuration

The IBM 1401 at the U.S.C. Graduate School of Business was selected to do the initial work on the project. (See Appendix A-19.) It was selected for several reasons: (1) It was available to the staff on a "sign up" basis; (2) IBM computers and peripheral equipment are in general use throughout Southern California; (3) The IBM 1403 printer is excellent for reduction printing; (4) The collating order of the 1401 processor is close to that of existing library rules; and (5) The programs are easy to learn and write also easy to use.

The IBM 1401 system available for our use, is adequate to handle the project requirements. It has 8,000 (8K) positions of core and, two 729 high speed tape drives. The 1401 processor contains the high-low equal compare feature, three index registers, the write-space suppress feature and other special features.

Having the IBM 1401 available on a "sign up" basis, afforded an opportunity to experiment with programs that would allow the performance of many jobs that otherwise would have to be done by hand. Therefore, being able to "walk-in" and use the equipment as one would use an available typewriter, calculator or mimeograph aided greatly in the furtherance of the project.

IBM 1401's and related peripheral equipment are in general use in the public school systems throughout Southern California. As a matter of fact, IBM data processing equipment is in such general use that a detailed survey of equipment was felt to be unnecessary. (See Appendix A-20.)

The IBM 1403 is a chain type printer. (See Appendix A-21.)

It is extremely reliable and even after hours of use, it can produce acceptable camera-ready copy. As the eye accepts horizontal variations in print-out more readily than vertical ones, the printer can run indefinitely with very little adjustment. Furthermore, changing the ribbon is a simple task which any ordinary operator can do in a very few minutes. Some other types of printers require a customer engineer.

The hierarchy of the collating order of the 1401 processor is remarkably close to good filing procedures. (See Appendix A-22.) The "nothing before something" rule applies and numbers follow letters. The processor recognizes special characters such as commas, periods and dashes in the collating order as well as numbers and letters. Therefore, special characters file are held to a minimum in the titles. All such characters file ahead of letters.

The initial computer programs were written by the project director in IBM Symbolic (SPS) language. Later, a special programmer was hired to use a more powerful computer language -- IBM Autocoder.

File Composition

The tape file as of June, 1966 was composed of information concerning approximately 20,000 16mm non-theatrical motion pictures, filmstrips and film loops. Within each record, certain types of information are positioned in such a manner as to make retrieval of a specific record possible on any one or several conditions as set forth by the programmer. Records can be added, changed or deleted at will. As a new organization is selected and their catalog is compared to the master file, new records are added to the master file which makes it grow even larger.

File Organization

A cardinal rule for deciding upon how the records on a tape file are to be organized, is to consider first the manner in which the file will be used most frequently. If, for instance, the material is to be listed most frequently in order by producer, then the first record should contain the materials produced by the producer whose name comes first in alphabetical order and so on. On the other hand, if the material is best utilized in straight alphabetical order by title, it should be organized that way. The problem was presented to the advisory board and it was agreed that most materials were referred to by title and the file should assume that character.

Other decisions followed. For instance, if two records contained identical titles, what should be considered next? Normally, data and computer processing procedures call for a serial number to be assigned to each record. This was a new file and there was no definite idea how large it would grow or how to assign proper serial numbers. Since the file was to be used operationally from the beginning, it was decided to take advantage of the excellent collating arrangement of the IBM 1401 processor. Therefore, a four-field-compare routine was devised (title, media, time and producer code) which is used to locate all records on the master tape. Likewise, all records are changed, deleted or merged in this same manner. (When the computer searches for a given record and is programmed to check the four fields, a positive identification is made when all fields are equal.)

Naturally, other information is needed besides the four fields mentioned above. An area is identified as the biographical (bio-data) which included such other items as size, type of track (sound) and stock (black and white, color.) Also identified is the distributor code, production credit code, year produced, series, title and annotation. All of these and more are located on the tape in such a manner that cueing is possible for any one or all of these items.

File Maintenance

No file is useful unless it is maintained and up-to-date. Therefore, no file can be better than its maintenance procedure permits it to be. Keeping this master file current called for an elaborate system of control cards designed to manipulate the records in order to add, delete or change them. (See Appendix A-23.) Rather unique problems were encountered because of the four-field-compare technique used to locate and merge records.

The maintenance program is designed to keep account of all records by batches. Furthermore, it indicates when a record was first entered and when it was last changed. This is helpful when attempting to locate original input materials or simply for informational purposes. Totals are included to give the number of additions, deletions, corrections and total number of records on the master tape.

Pert

In order to be able to visualize the system and make adjustments in it, the Program Evaluation and Review Technique (PERT) was employed. A network was prepared showing the events and activities needed to develop an instructional material catalog under the automated cataloging process. (See Appendix A-24.)

V. CONCLUSIONS, IMPLICATIONS AND RECOMMENDATIONS

The establishment of an Automated Cataloging Service for the eight counties in Southern California is not only feasible, but, in the opinion of the writer, a necessity. Furthermore, the need was found to be so great and so wide spread that the service should be nationwide as soon as possible. With the experience gained by U.S.C. since 1959 in utilizing electronic data processing techniques in cataloging and with the great forward strides given by the influx of federal funds, the U.S.C. master file has become unique. Its integrity must be maintained. This can only be done by proper management, regular maintenance and by accepting the fact that a single center must be totally responsible for input to the master file. Control can then be assured.

The project has establed another important fact. No one group can supply the services needed by the libraries throughout the country. With the need so great, regional and local centers must be set up to perform these tasks. These centers must be under some obligation to the input center in order that the recipient of the information can be assured of the latest information from the master file. Much study needs to be made of the newer developments in the technology. This study has developed a file and proven the systems approach for preparing catalogs. Additional studies designed to protect the integrity of the master file and improve its usefulness should follow those started in this project.

There was no previous pattern for making comparisons between the computerized cataloging systems and alternate systems until the project was completed. Most of the time, then was consumed in setting up the system and the master file sufficiently to prove the feasibility aspect. Other work needs to be done in comparing systems and testing later technological developments as they relate to this field.

VI. SUMMARY

The purpose of this study was, in essence, to determine the feasibility of establishing a center for preparing Instructional Material Catalogs for groups in the eight Southern California Counties of California and to determine the problems and costs involved. To do this, it was necessary to establish some standards for input for material that could be used in a computer.

Not only were standards of input necessary but also a number of catalogs needed to be converted, printed, and distributed in order for a system to be classed as feasible. This called for a style of print-out or page lay-out for catalogs that was well organized and could be read easily.

In due course, programs were written and the problems solved to accomplish the experiment; and, it is generally agreed at this early date, that a center can and must be established to do the work and that other centers throughout the state and nation should be established in order that other groups can obtain similar services. It has become apparent that the system devised is of such value that it could be accepted on a nation-wide basis as a standard for cataloging Instructional Materials and as a compatible system for preparing local library catalogs.

VII. APPENDIX

A-1. Examples of U.S.C. Catalogs, 1959-1963
A-2. Organizations Participating in The Automated Cataloging Project
A-3. Mark Sensing Form
A-4. Examples of User Forms
A-5. Master Title Listing
A-6. Master File Listing, Marked Copy
A-7. Organization Report Form for Producers
A-8. Call Cards
A-9. Lead Cards
A-10. Example of Two-column Print-out
A-11. Subject Matter Index
A-12. Subject Matter Two-column Print-out
A-13. Producer Codes
A-14. Alpha and Omission Checks
A-15. Call Cards Adapted to Inventory Record
A-16. Flow Charts
A-17. Sample Pages From 1966 U.S.C. Catalog
A-18. Automated Catalog Newsletter
A-19 - 20 - 21. Photographs
A-22. Collating Order
A-23. Sample Print-out Maintenance Run
A-24. PERT
A-25. Explanation of Automated Cataloging Preparation

TEACHERS, A MAN DISPUTES THE INSTRUCTORS THESIS THAT MUSIC SHOULD BE FUN. UTILIZING RESOURCES WITHIN THE CLASSROOM, SHE RECRUITS A CAKEWALKER. TO COMBAT TALK ABOUT THE PROBLEM OF PART-SINGING, THE INSTRUCTOR STARTS THE CLASS SINGING IN HARMONY. BOOMING OUT CHEERILY IS THE MAN WHO DOUBTED MUSIC EDUCATION CAN BE FUN.

MY TRIP ABROAD - 16M, B&W, SD. $2.75 - SALE $60 ENGLISH

WINNING AN AMERICAN FIELD SERVICE INTERNATIONAL SCHOLARSHIP, GUNDOLF GOETHEL OF OBERHAUSEN, GERMANY, PARTICIPATES IN THE TEENAGE EXCHANGE PROGRAM. IN THIS FILM HE TELLS HIS IMPRESSIONS OF HIS YEAR, LIVING WITH AN AMERICAN FAMILY AND ATTENDING CULVER CITY HIGH SCHOOL IN CALIFORNIA, FROM WHICH HE RECEIVES HIS DIPLOMA.

MY TRIP ABROAD - 16M, B&W, SD. $2.75 - SALE $60 - GERMAN

NO MARGIN FOR ERROR - 26M, C, SD. $5 - SALE $155

THROUGH THE STUDY OF AERONAUTICAL ENGINEERING, AS IT APPLIES TO FLYING, AVIATION PSYCHOLOGY AND AVIATION PHYSIOLOGY, A PROFESSIONAL UNDERSTANDING OF AIRCRAFT AND THE MEN WHO FLY THEM IS DEVELOPED.

OCCURRENCE AT OWL CREEK BRIDGE, AN - 17M, C, SD. $4.50 - SALE $120

AN ADAPTATION OF AMBROSE BIERCES FAMOUS SHORT STORY OF THE CIVIL WAR. EVENTS LEADING TO THE EXECUTION OF A CIVILIAN PLANTER ARE SHOWN IN THE PROLOGUE, THE BODY OF THE FILM DETAILS THE PREPARATIONS OF THE EXECUTION PARTY AND THE PLANTERS ESCAPE, BUILDING TO A SURPRISE ENDING.

ON SEEING FILM, FILM AND LITERATURE - 17M, B&W, SD. $3 - SALE $90

MADE FROM FOOTAGE FILMED BEHIND THE SCENES IN CEYLON DURING PRODUCTION OF THE ACADEMY-WINNING FILM, THE BRIDGE ON THE RIVER KWAI. THIS UNIVERSITY-PRODUCED EDUCATIONAL FILM INCLUDES SCENES OF DAVID LEAN DIRECTING ALEC GUINESS IN REHEARSAL, PLUS SEVERAL CLIPS FROM THE FEATURE FILM ITSELF. THE NARRATOR EXPLAINS THAT BELIEVABLE EVENTS, CHARACTERS, AND CONDUCT COMBINE TO MAKE A MEMORABLE EXPERIENCE WHETHER IN A BOOK OR IN A FILM.

OUT OF THE SHADOWS - 20M, B&W, SD. $3.00 - SALE $75

FILMED AT THE FOUNDATIONS SCHOOL, OUT OF THE SHADOWS SHOWS CHILDREN RECEIVING PHYSICAL, SPEECH, AND OCCUPATIONAL THERAPY. THE PROGRESS SOME OF THE CHILDREN HAVE MADE EMPHASIZES THAT CEREBRAL PALSY DOES NOT NECESSARILY AFFECT THE INTELLIGENCE, ALTHOUGH IT DOES AFFECT THE MOTOR NERVES. THE FILM STRESSES THE NEED FOR MANY MORE TRAINING AND ADJUSTMENT FACILITIES.

PAPER - 10 M, C, SD. $4 - SALE $100

FROM THE SERIES MILESTONES IN WRITING. SHOWS THE MAKING OF A PIECE OF PAPER BY THE PROCESSES USED WHEN PAPER FIRST ARRIVED IN THE WESTERN WORLD. FEATURES DR. FRANK BAXTER.

PAPYRUS - 10M, C, SD. $4 - SALE $100

FROM THE SERIES MILESTONES IN WRITING. STRESSES THE IMPORTANCE OF THE PAPYRUS PLANT IN THE LIFE OF THE ANCIENT EGYPTIANS, WITH EMPHASIS ON ITS USE AS A WRITING SUBSTANCE. A PIECE OF PAPYRUS IS MADE IN THE ANCIENT WAY, FOLLOWING THE DIRECTIONS LEFT US BY THE ROMAN, PLINY. FEATURES DR. FRANK BAXTER.

PARSONS, HARRIET - 32M, B&W, SD. $4.50 - SALE $125

FROM THE SERIES THEATRICAL FILM SYMPOSIUM. MISS HARRIET PARSONS, THE ONLY WOMAN PRODUCER IN HOLLYWOOD, DISCUSSES PRE-PRODUCTION PLANNING. PART OF THE PRODUCERS JOB SHE TERMS RECONCILING SEEMINGLY IRRECONCILABLE FACTORS. SHE EXPLAINS THE COMPLEXITY OF BUDGETS AND THE DIFFICULTY OF ESTIMATING COSTS BEFORE SHOOTING. THE PRODUCERS FOREMOST VITAL DECISIONS, MISS PARSONS SUMS UP, ARE CHOICE OF SUBJECT MATTER, SELECTION OF A WRITER, CASTING OF LEADING ROLES, AND CHOICE OF A DIRECTOR.

PICTOGRAPHS - 10M, C, SD. $4 - SALE $100

FROM THE SERIES MILESTONES IN WRITING. THE DEVELOPMENT OF MANS EARLY EFFORTS AT WRITTEN COMMUNICATION THROUGH PICTURE WRITING AND IDEA SIGNS. FEATURES DR. FRANK BAXTER.

PLACE IN THE SUN, A - 14M, B&W, SD. $2.75 - SALE $75

A FORMER PRISONER IN A BARRED CELL, JOHNNY IS CONVICTED OF ATTEMPTED BURGLARY. CONSIDERED REHABILITABLE, HE IS SENT TO THE WAYSIDE HONOR FARM. WORKING EIGHT PRODUCTIVE HOURS A DAY, SOME MEN BUILD ROADS. OTHERS INSTALL PIPES TO IRRIGATE THE 600 ACRES. MANY HARVEST CROPS. ALL HAVE PLENTY OF HOME-GROWN FOOD. THEY HAVE A LIBRARY. THEY HEAR A PIANO CONCERT BY JOSE ITURBI. THEY PLAY MUSICAL INSTRUMENTS IN THEIR BARRACKS. ALL OF THESE, THE FILM SUMS UP, ARE OPPORTUNITIES TO BECOME USEFUL CITIZENS.

PLANNING THE MUSEUM TRIP - 9M, B&W, SD. $2.50 - SALE $45

THE MUSEUMS EDUCATIONAL DIRECTOR SPEAKS DIRECTLY TO FIFTH GRADERS IN THIS FILM, WHICH IS DESIGNED TO HELP ALL TEACHERS AND PUPILS GET THE MOST OUT OF MUSEUM TRIPS BY CAREFUL PLANNING IN ADVANCE. IN THE CLASSROOM THE CHILDREN DECIDE WHAT THEY WANT TO SEE. THEY BUILD MODELS, SUCH AS LOG CABINS, ETC. THE CHILDREN DRAW UP PROCEDURES WHICH THEY WILL FOLLOW WHILE IN THE MUSEUM.

POTTER, THE - 13M, C, SD. $4.50 - SALE $100

A STUDY OF THE POTTERY CRAFTSMAN AT WORK. ILLUSTRATES THE USE OF THE POTTERS WHEEL, AND INDICATES THE METHODS OF DEVELOPING ORIGINALITY AND VARIETY IN POTTERY-MAKING.

POWERED INDUSTRIAL TRUCKS - 27M, B&W, SD. $3.25 - SALE $90

THIS FILM TRACES THE HISTORICAL DEVELOPMENT OF POWERED INDUSTRIAL TRUCKS IN THE SOLUTION OF MATERIALS HANDLING PROBLEMS, BY APPLICATION OF THE UNIT LOAD PRINCIPLE. THE FILM POINTS OUT THE PRINCIPLES OF OPERATION AND FEATURES OF THE FORK TRUCK, THE PLATFORM TRUCK, VARIOUS TYPES OF WALKIE TRUCKS, AND OTHER TYPES OF POWERED TRUCKS IN HANDLING UNIT LOADS ON SKIDS AND PALLETS AND MISCELLANEOUS LOADS. MANY DIFFERENT APPLICATIONS OF POWERED TRUCKS IN PRODUCTION AND DISTRIBUTION ARE ILLUSTRATED, INCLUDING THE MOST MODERN DEVELOPMENT, THE PALLETLESS HANDLING OF MATERIALS.

PRACTICE COURTROOM--FELL VS MANLOCK - 7M, B&W, SD. $2.50 - SALE $30

THE FILM REPRODUCES THE CIRCUMSTANCES OF A DEPARTMENT STORE ACCIDENT LEADING TO A DAMAGE SUIT. THE FACTS OF THE CASE ARE PRESENTED FROM THE VIEWPOINTS OF FIVE WITNESSES, AND EACH SECTION MAY BE SHOWN SEPARATELY. THE FILM CONTAINS NO VERDICT. JUDGMENT OF THE FACTS OF THE TESTIMONY PRESENTED IS LEFT TO THE GROUP.

PRINTING - 10M, C, SD. $4 - SALE $100

FROM THE SERIES MILESTONES IN WRITING. TRACES THE DEVELOPMENT OF WOOD BLOCK PRINTING AND PRINTING FROM MOVABLE TYPES. THE TECHNIQUES OF THE EARLY PRINTERS ARE DEMONSTRATED WITH A MODEL OF A 16TH CENTURY PRINTING PRESS. FEATURES DR. FRANK BAXTER.

PROCEDURES IN THE DIAGNOSIS OF - 32M, C, SD. $6 - SALE $175

PROCEDURES IN THE DIAGNOSIS OF CARDIOVASCULAR DISEASES - THIS FILM, FOR THE GENERAL MEDICAL PROFESSION, INTERNS, AND MEDICAL STUDENTS, TAKES A PATIENT FROM INITIAL PHYSICAL EXAMINATION THROUGH A COMPLETE DIAGNOSIS. USING X-RAY PHOTOGRAPHY, IT REVIEWS ALL THE LATEST TECHNIQUES OF CARDIOVASCULAR DIAGNOSIS. CARDIAC CATHETERIZATION, VECTORCARDIOGRAM, PHONOCARDIOGRAM, BALLISTOCARDIOGRAM, BESIDES THE USUAL CARDIAC DIAGNOSTIC TECHNIQUES, ARE DEMONSTRATED IN THE FILM.

PROPERTY LINES - 22M, B&W, SD. $3 - SALE $75

THIS STORY OF THE LAND AND THE LINES THAT DIVIDE THE LAND FOR OWNERSHIP. TRACES THE DEVELOPMENT OF SURVEYING FROM ROPESTRETCHERS, RE-ESTABLISHING BOUNDARIES ERASED BY THE FLOODING NILE, TO TWO NEIGHBORS IN MODERN LOS ANGELES DISPUTING THEIR BOUNDARIES. ONE, BAFFLED IN THE ATTEMPT TO SURVEY HIS OWN LOT, CALLS IN A PROFESSIONAL SURVEYOR, WHO HELPS THEM REACH A FRIENDLY SOLUTION.

PROTEST, THE - 25M, B&W, SD. $3.25 - SALE $90.

THIS FILM PROTESTS THE TREATMENT GIVEN JUVENILE DELINQUENTS BOTH FROM THE STANDPOINT OF LAW AND PARENTAL AUTHORITY. IT ANSWERS NO QUESTIONS BUT PRESENTS THE JUVENILE PROBLEM AS SEEN BY THOSE WORKING WITH OFFENDERS, IN A HIGHLY DRAMATIC FASHION.

QUETZALCOATL - 20M, C, SD. $5 - SALE $155. ENGLISH

IN THE LEGEND OF QUETZALCOATL, THE FAIREST GOD OF THE AZTECS, DISPLACED BY THE RIVAL GOD, TEZCATLIPOCA, THE GODS AND MORTALS ARE PORTRAYED BY MASKS, STATUETTES, AND OTHER ARTIFACTS MADE BY THE PRE-COLUMBIAN INDIANS OF MEXICO. THE ORIGINAL MUSICAL SCORE IS BASED ON PRE-COLUMBIAN THEMES.

QUETZALCOATL - 20M, C, SD. $5 - SALE $155 GERMAN

QUETZALCOATL - 20M, C, SD. $5 - SALE $155 SPANISH

REACH INTO SILENCE - 15M, C, SD. LOAN - SALE $120.00

A FILM DESIGNED TO RECRUIT WORKERS TO WORK WITH HANDICAPPED CHILDREN ESPECIALLY THOSE WITH DEFECTIVE HEARING.

SCHOOL SOCIAL WORKER, THE - 25M, B&W, SD. SERV CHG $2 - SALE $40

THIS FILM PORTRAYS THE COOPERATIVE EFFORT OF THE SOCIAL WORKER WITH TEACHERS, PARENTS, AND OTHERS IN HELPING CHILDREN RESOLVE THE SOCIAL PROBLEMS THAT INTERFERE WITH THEIR SCHOOL ADJUSTMENT, LEARNING AND ATTENDANCE IN SCHOOL. IT PRESENTS SEVERAL CASE PROBLEMS WITH DIFFERENT AGE CHILDREN.

SPELLING AND LEARNING - 18M, B&W, SD. $3 - SALE $75

INTENDED PRIMARILY FOR IN-SERVICE TEACHER TRAINING AND PRESERVICE TRAINING, THIS FILM STRESSES THAT LEARNING IS CONCERNED PRINCIPALLY WITH MOTIVATION AND REWARD. EXAMPLES ARE SHOWN OF THE MOTIVATION OF THE CHILD AT VARIOUS AGE LEVELS TO THE IMPORTANCE OF WORDS, FROM THE FORMATION OF SPEECH TO WRITING CREATIVELY IN THE ELEMENTARY CLASSROOM.

STAIRWAY CONSTRUCTION - 23M, B&W, SD. $3 - SALE $75

SOME PRINCIPLES OF STAIRWAY DESIGN, LAYOUT, AND CONSTRUCTION. THIS TRAINING FILM IS INTENDED FOR TRADE SCHOOL STUDENTS AND CARPENTRY

DRAMA, SUBJECT OF--SEE THE FOLLOWING
BLACK CAT, THE - 15M, C, SD. $4.50 - SALE $120
ESCAPE TO NOWHERE - 9M, B&W, SD. $3.00 - SALE $45
OCCURRENCE AT OWL CREEK BRIDGE, AN - 17M, C, SD. $4.50 - SALE $120
STRATEGIC AIR POWER - 25M, B&W, SD. SERV CHG $3.25

E

ECONOMICS, SUBJECT OF--SEE THE FOLLOWING
BIG TRAINS ROLLING - 26M, C, SD. SERV CHG $5.50
EXPANDING WORLD RELATIONSHIPS - 10M, B&W, SD. SERV CHG $3.00
JOURNEY TO DANALI - 10M, B&W, SD. $3.00
MADE IN U.S.A. - 10M, B&W, SD. $3.00
POWER AND THE LAND - 38M, B&W, SD. $3.75
WORLD IS RICH, THE - 43M, B&W, SD. $4.00

EDUCATION, SUBJECT OF--SEE THE FOLLOWING
ARRANGED ENVIRONMENT - 4M, B&W, SD. $3. - SALE $30
B FLAT CLARINET, THE - 9M, B&W, SD. $3.00
BALANCES--PLATFORM AND TRIPLE BEAM - 10M, C, SD. $4 - SALE $85
BETTER TOMORROW, A - 20M, B&W, SD. $3
BIG ADVENTURE, THE - 15M, B&W, SD. $3.00 - SALE $60
BLACK CAT, THE - 15M, C, SD. $4.50 - SALE $120
BROADER CONCEPT OF METHOD--PART II - 19M, B&W, SD. $3.00
BROADER CONCEPT OF METHOD--PART I - 13M, B&W, SD. $3.00
CHALLENGE, THE - 12M, C, SD. $4.00 - SALE $60
CHEMICAL INSTRUMENTS - 14M, C, SD. $4.50 - SALE $120
COMMUNICATIONS PRIMER - 23M, C, SD. $5.00
CONDITIONING THE GALVANIC SKIN - 8M, B&W, SD. $3.00 - SALE $45
COUNSELING--ITS TOOLS AND TECHNIQUE - 22M, B&W, SD. $3
EARS AND HEARING - 11M, B&W, SD. $3.00
ELEMENTARY LAB TECHNIQUES IN BACTERIOLOGY - 20M, C, SD. $5 SALE $155
ELEMENTARY TACTICS OF LIFESAVING - 22M, B&W, SD. SERV CHG $3.00
EXACT SMALL THINGS - 30M, B&W, SD. SERV CHG $4.75
FIGHT FOR BETTER SCHOOLS - 20M, B&W, SD. SERV CHG $3.00
FRIENDLY GIANT, THE--A SERIES
FROM SENTENCES TO PARAGRAPHS - PART 1 - 30M, B&W, SD. SERV CHG $4.75
GOOD SPEECH FOR GARY - 22M, B&W, SD. $3
GOOD SPEECH FOR GARY - 22M, C. SD. $5
HOW A SCIENTIST WORKS - 15M, C, SD. $4.50
HOW THE EAR FUNCTIONS - 10M, B&W, SD. $3.00
HOW THE EYE FUNCTIONS - 15M, B&W, SD. $3.00
IMPORTANCE OF GOALS, THE - 18M, B&W, SD. $3
NOUNS AND VERBS VERSUS - 30M, B&W, SD. SERV CHG $4.75
ON THE GO - 30M, B&W, SD. SERV CHG $3.50
PACK TRIP IN GLACIER NATIONAL PARK - 15M, C, SD. $4.50
POWER FOR PROGRESS - 24M, C, SD. SERV CHG $5.50
QUILL, THE--A SERIES--SEE FOLLOWING TITLES
SMALL WORLD OF MR. PENNYFEATHER, THE - 44M, C, SD. SERV CHG $6.00
STYLE IN WRITING - PART 1 - 30M, B&W, SD. SERV CHG $4.75
WHATEVER THE WEATHER - 10M, C, SD. $4.00
WRITING FORCEFUL SENTENCES - PART 1 - 30M, B&W, SD. SERV CHG $4.75
WRITING FORCEFUL SENTENCES - PART 2 - 30M, B&W, SD. SERV CHG $4.75
INDIVIDUAL DIFFERENCES - 22M, B&W, SD. $3.25
LEARNING TO UNDERSTAND CHILDREN - 21M, B&W, SD. $3
LEARNING TO UNDERSTAND CHILDREN - 23M, B&W, SD. $3
LIFE SITUATION FILMS-A SERIES - 5M, B&W, SD.
LIFE SITUATION FILMS--A SERIES - 5M, C, SD.
LIFE WITH BABY - 18M, B&W, SD. $3
MAINTAINING CLASSROOM DISCIPLINE - 14M, B&W, SD. $3.00
MECHANICS OF HUMAN MOTION-THROWING - 25M, B&W, SD. $3.25 SALE $100
MILESTONES IN WRITING--A SERIES
MUSIC EDUCATION WORKSHOP - 10M, C, SD. $4.00 - SALE $85
MUSIC FOR YOUNG PEOPLE -- A SERIES
NEAR HOME - 25M, B&W, SD. $3.25
ON SEEING FILM, FILM AND LITERATURE - 17M, B&W, SD. $3 - SALE $90
OVERDEPENDENCY - 30M, B&W, SD. $3.50
PLANNING THE MUSEUM TRIP - 9M, B&W, SD. $3.00 - SALE $45
PRACTICE COURTROOM--FELL VS MANLOCK - 7M, B&W, SD. $3.00 - SALE $30
PROBLEMS OF PUPIL ADJUSTMENT - 20M, B&W, SD. $3
PROBLEMS OF PUPIL ADJUSTMENT - 19M, B&W, SD. $3
SCREEN ACTORS, THE - 10M, B&W, SD. $3.00
SPELLING AND LEARNING - 18M, B&W, SD. $3 - SALE $75
SPIRIT OF TROY - 11M, C, SD. LOAN
TALKING SENSE--A SERIES
TEACHER AND THE LAND - 20M, C, SD. $5. - SALE $155
TEACHING TODAY, 14M, C, SD. $4.50 - SALE $120.00
THEY THINK FOR THEMSELVES - 23M, B&W, SD. $3. - SALE $90
THINNEST SLICE, THE - 21M, B&W, SD. $3 - SALE $75
UNDERSTANDING NUMBERS--A SERIES
WHO WILL TEACH YOUR CHILD - 24M, B&W, SD. $3.25
WILLIE AND THE MOUSE - 10M, B&W, SD. $3.00
WRITTEN WORD, THE--A SERIES
YOURS FOR THE TAKING - 23M, C, SD. $5 - SALE $155

ELECTRONICS, SUBJECT OF--SEE THE FOLLOWING
AIRCRAFT ENGINES--ELEMENTS OF - 28M, B&W, SD. SERV CHG $3.25
AUDIOTAPE SPEAKS FOR ITSELF - 20M, C, SD. SERV CHG $5.00
CATHODE RAY OSCILLOSCOPE - 20M, B&W, SD. SERV CHG $3.00
CATHODE RAY TUBE, THE - 15M, B&W, SD. SERV CHG $3.00
INTRODUCTION TO RADAR - 26M, B&W, SD. SERV CHG $3.25
LIGHTNING MASTERS - 30M, C, SD. SERV CHG $6.00
RADIO TECHNICAN TRAINING--A SERIES
SOUND RECORDING AND REPRODUCTION - 11M, B&W, SD. $3.00
THINNEST SLICE, THE - 21M, B&W, SD. $3 - SALE $75

ENGINES, SUBJECT OF--SEE THE FOLLOWING
AIRCRAFT ENGINES--ELEMENTS OF - 28M, B&W, SD. SERV CHG $3.25
ALLISON ENGINE--INTRODUCTION AND - 8M, B&W, SD. SERV CHG $3.00
ENGINE CHANGE--A SERIES
FOREIGN MATERIAL INGESTION - 18M, C, SD. SERV CHG $5.00
JET PROPULSION - 12M, C, SD. SERV CHG $4.00
PREFLIGHT INSPECTION--A SERIES
TROUBLE SHOOTING PROBLEMS--A SERIES
WRIGHT ENGINE--1820--A SERIES

F

FLIGHT INSTRUCTION, SUBJECT OF--SEE THE FOLLOWING
ADJUSTMENTS AFTER FLIGHT CHECK - 19M, B&W, SD. SERV CHG $3.00
AIRBORNE MAGNETOMETER, THE - 24M, B&W, SD. SERV CHG $3.25
AIRPLANE STRUCTURES--A SERIES
AUTOMATIC PILOT - 10M, B&W, SD. SERV CHG $3.00
CELESTIAL NAVIGATION--A SERIES
CHANDELLE - 7M, B&W, SD. SERV CHG $3.00
FADE PARALLEL SYSTEM AND - 10M, B&W, SD. SERV CHG $3.00
FLIGHT PATH PRECISION - 21M, B&W, SD. SERV CHG $3.00
FLIGHT SAFETY--A SERIES
GYRO COMPASS--A SERIES
HOW AN AIRPLANE FLIES--A SERIES
HOW TO FLY THE B-26 AIRPLANE-LOADING - 25M, B&W, SD. SERV CHG $3.25
HOW TO FLY THE B-26 AIRPLANE - 45M, B&W, SD. SERV CHG $4.00
HOWGOZIT CHART, THE - 13M, C, SD. SERV CHG $4.50
ICE FORMATION ON AIRCRAFT- 48M, B&W, SD. SERV CHG $4.00
INERTIAL NAVIGATION - 18M, C, SD. SERV $5.00
INSTRUMENT FLIGHT CONTROL--A SERIES
INTEGRATED LANDING AIDS, PART 1 - 25M, C, SD. SERV CHG $5.50
INTEGRATED LANDING AIDS, PART 11 - 23M, C, SD. SERV CHG $5.50
INTERMEDIATE ACROBATICS--A SERIES
PREFLIGHT INSPECTION--A SERIES
PRIMARY FLIGHT TRAINING--A SERIES
VISUAL FLIGHT RULES - 21M, C, SD. SERV CHG $5.50
WEATHER FOR NAVIGATION - 9M, B&W, SD. SERV CHG $3.00

FOLKLORE, SUBJECT OF--SEE THE FOLLOWING
DAINIC NATYA - DAILY DANCE - 8M, C, SD. $4.00 - SALE $90
LOONS NECKLACE, THE - 10M, C, SD. $4.00
QUETZALCOATL - 20M, C, SD. $5 - SALE $155 GERMAN
QUETZALCOATL - 20M, C, SD. $5 - SALE $155 SPANISH
QUETZALCOATL - 20M, C, SD. $5 - SALE $155. ENGLISH

FOREIGN FILMS, SUBJECT OF--SEE THE FOLLOWING
EMERGENCY HOUSEWIFE - 14M, B&W, SD. $3 - SALE $60
GREAT BRITAIN & EXERCISE SWEETBRIAR - 20M, B&W, SD. SERV CHG $3
NEAR HOME - 25M, B&W, SD. $3.25
TARGET FOR TONIGHT - 48M, B&W, SD. SERV CHG $4.00

G

GENERAL SCIENCE, SUBJECT OF--SEE THE FOLLOWING
ATOM, THE--A SERIES
BALANCES--PLATFORM AND TRIPLE BEAM - 10M, C, SD. $4 - SALE $85
BIG TRAINS ROLLING - 26M, C, SD. SERV CHG $5.50
CARBON-OXYGEN CYCLE - 10M, B&W, SI. $3.00
CHEMICAL INSTRUMENTS - 14M, C, SD. $4.50 - SALE $120
CHEMISTRY OF FIRE, THE - 46M, B&W, SD. SERV CHG $4.00
COLLOIDS--ELEMENTARY PRINCIPLES - 10M, B&W, SD. RENTAL $3.00
ELEMENTARY LAB TECHNIQUES IN BACTERIOLOGY - 20M, C, SD. $5 SALE $155
ELEMENTS, THE -- A SERIES
LIGHTNING MASTERS - 30M, C, SD. SERV CHG $6.00
POWER FOR PROGRESS - 24M, C, SD. SERV CHG $5.00

GEOGRAPHY, SUBJECT OF--SEE THE FOLLOWING
AIRPLANE CHANGES OUR WORLD MAP - 11M, B&W, SD. SERV CHG $3.00
BIG TRAINS ROLLING - 26M, C, SD. SERV CHG $5.50
JOURNEY TO DANALI - 10M, B&W, SD. $3.00
POLAND, THE COUNTRY AND THE PEOPLE - 20M, B&W, SD. $3

GOVERNMENT, SUBJECT OF--SEE THE FOLLOWING
DECISION--A SERIES
DOOMED, THE - 22M, B&W, SD. $3 - SALE $75
OHIO TOWN - 19M, B&W, SD. $3
PEOPLES CHARTER - 17M, B&W, SD. $3.00

H

HANDICAPPED, SUBJECT OF--SEE THE FOLLOWING
GOOD SPEECH FOR GARY - 22M, B&W, SD. $3
GOOD SPEECH FOR GARY - 22M, C. SD. $5
LET ME SEE - 20M, C, SD. $5 - SALE $155
LIFE SITUATION FILMS-A SERIES - 5M, B&W, SD.
LIFE SITUATION FILMS--A SERIES - 5M, C, SD.
LIGHT FOR JOHN, A - 22M, B&W, SD. $3.50 - SALE $75
LISTENING EYES - 19M, C, SD. $5 - SALE $155
OUT OF THE SHADOWS - 20M, B&W, SD. $3.00 - SALE $75
PLACE IN THE SUN, A - 14M, B&W, SD. $3.00 - SALE $75
REACH INTO SILENCE - 15M, C, SD. LOAN - SALE $120.00
THURSDAYS CHILDREN - 22M, B&W, SD. SERV CHG $3.00
TOO YOUNG TO SAY - 15M, C, SD. $4.50 - SALE $120

HEALTH, SUBJECT OF--SEE THE FOLLOWING
CAPITAL STORY, THE - 20M, B&W, SD. $3
CONTROL OF FILARIASIS - 15M, C. SD. $4.50 - SALE $120 FRENCH
CONTROL OF FILARIASIS IN TAHITI - 15M, C, SD. $4.50 - SALE $120
CONTROL OF NON-PERIODIC FILARIASIS - 21M, C, SD. $5 - SALE $155
EARS AND HEARING - 11M, B&W, SD. $3.00
FILARIASIS OF THE EYE CAUSED BY LOA-LOA - 10M, C, SI. $4 - APPLY
HEALTH FOR A CITY - 15M, C, SD. $4.50 - SALE $120
HOW THE EAR FUNCTIONS - 10M, B&W, SD. $3.00
HOW THE EYE FUNCTIONS - 15M, B&W, SD. $3.00
ITS GONE - 13M, C, SD. $4.50 - SALE $120
LET ME SEE - 20M, C, SD. $5 - SALE $155
LISTENING EYES - 19M, C, SD. $5 - SALE $155
OUT OF THE SHADOWS - 20M, B&W, SD. $3.00 - SALE $75

HOW TO OPERATE THE JAN PROJECTOR - 25M, B&W, SD. $3.25
A STEP BY STEP DESCRIPTION OF THE PROPER PROCEDURES OF CHECKING AND OPERATING A 16MM MOTION PICTURE PROJECTOR.

HOWGOZIT CHART, THE - 13M, C, SD. SERV CHG $4.50
FROM THE SERIES, FLYING THE WEATHER MAP. EXPLAINS THE PURPOSE OF THE HOWGOZIT CHART AND SHOWS HOW THE FLIGHT CONTROL OFFICER PLOTS THE EXPECTED FUEL CONSUMPTION AND THE NAVIGATOR CHECKS CONSUMPTION DURING THE FLIGHTS PROGRESS. STUDIES THE VARIOUS MARKINGS OF THE CHART AND FOLLOWS THE CHARTING OF A FLIGHT FROM SCOTLAND TO NEWFOUNDLAND.

HYPNOTIC BEHAVIOR - 20M, B&W, SD. $3
A YOUNG MAN AND WOMAN SEATED AT A TABLE ARE HYPNOTIZED BY A VOICE OFF SCREEN. IN THE TRANCE STATE, VARIOUS HYPNOTIC PHENOMENA ARE DEMONSTRATED, INCLUDING CATALEPSY, ANESTHESIA, BLINDNESS, DEAFNESS, AND ACCEPTANCE OF POSTHYPNOTIC SUGGESTIONS. AFTER WAKING FROM THE TRANCE, THE SUBJECTS EXECUTE TWO POSTHYPNOTIC SUGGESTIONS, ONE OF WHICH ENDURES FOR SEVERAL HOURS. THE FILM CAN BE USED FOR TEACHING PURPOSES WHERE ACTUAL HYPNOSIS IS NOT FEASIBLE.

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ICE FORMATION ON AIRCRAFT- 48M, B&W, SD. SERV CHG $4.00
FROM THE SERIES, AEROLOGY. SHOWS PROCESSES OF ICE FORMATION, EFFECT OF ICE ON AIRCRAFT, AND EXPLAINS HOW WING ICE, ICE IN THE PILOT TUBE, ICE ON THE PROPELLER, AND ICE IN THE CARBURETOR BECOME FLYING HAZARDS.

IGNITION - 19M, B&W, SD. SERV CHG $3.00
FROM THE SERIES, TROUBLE SHOOTING PROBLEMS. SHOWS HOW TO FIND WHAT SYSTEM OF THE ENGINE IS CAUSING TROUBLE, HOW TO LOCATE TROUBLE WITHIN THE IGNITION SYSTEM WHEN AN ENGINE FAILS TO START, WHEN IT RUNS ROUGH, AND WHEN IT FAILS TO DEVELOP FULL POWER, HOW TO REPAIR AND CHECK ENGINE OPERATION AFTER TROUBLE SHOOTING.

IMMELMAN - 11M, B&W, SD. SERV CHG $3.00
FROM THE SERIES, INTERMEDIATE ACROBATICS. DEMONSTRATES THE PROCEDURE OF PERFORMING THE IMMELMAN. ERRORS ARE SHOWN AND THE CAUSES AND RESULTS EXPLAINED. SHOWS HOW THE IMMELMAN CHANGES THE PILOTS STATUS FROM DEFENSIVE TO OFFENSIVE. THE IDEA OF RELAXING IS STRESSED.

IMPORTANCE OF GOALS, THE - 18M, B&W, SD. $3
CORRELATED WITH THE BOOK PSYCHOLOGY IN EDUCATION BY HERBERT SORENSON. THE CASE OF 13-YEAR OLD TOMMY ILLUSTRATES THE PRINCIPLE THAT ALL EDUCATION IS ESSENTIALLY A PROCESS OF ATTAINING BASIC, MEANINGFUL GOALS.

INDIVIDUAL DIFFERENCES - 22M, B&W, SD. $3
THE CASE STUDY OF A SHY, SLOW CHILD WHO IS DIFFERENT FROM HIS CLASSMATES AND FROM HIS OLDER BROTHER. POINTS OUT THAT INDIVIDUAL DIFFERENCES MUST BE MET IN TERMS OF INDIVIDUAL INTERESTS AND CAPABILITIES, THAT IT IS THE JOB OF THE SCHOOL TO SHAPE EDUCATION TO INDIVIDUAL NEEDS.

INDUCTANCE - 35M, B&W, SD. SERV CHG $3.75
FROM THE SERIES, RADIO TECHNICIAN TRAINING. SHOWS BY MEANS OF STRAIGHT PHOTOGRAPHY AND ANIMATION HOW A MAGNETIC FORCE REACTS AROUND A COIL. EXPLAINS SELF-INDUCTANCE AND HOW TO INCREASE THE VALUE OF IT, AND HOW TO INCREASE THE INDUCTANCE OF A COIL.

INERTIAL NAVIGATION - 18M, C, SD. SERV CHG $5.00
A SCIENCE INTERVIEW WITH MR. JOHN M. SLATER OF AUTONETICS. MR. SLATER COMPARES THE OLDER METHODS OF CONTROLLING AIRCRAFT WITH THE NEWER METHOD OF INERTIAL NAVIGATION. THROUGH LECTURE AND DEMONSTRATION, HE EXPLAINS THE VARIOUS NAVIGATIONAL METHODS AND THE THEORIES BEHIND THEM.

INSPECTION AND MAINTENANCE - 25M, B&W, SD. SERV CHG $3.25
FROM THE SERIES, SEA RESCUE EQUIPMENT FOR PLANE CREWS. DEPICTS A PILOT BAILING OUT, HITTING THE WATER AND USING HIS LIFE VEST. SHOWS HOW VESTS ARE INSPECTED PRIOR TO ISSUE, HOW A COLD PATCH IS APPLIED, INSPECTING THE LIFE RAFT, CHECKING THE SURVIVAL KIT, INSPECTING THE THE CO2 CYLINDER, PACKING THE RAFT AND STOWING IT IN THE AIRPLANE RAFT COMPARTMENT.

INSPECTION OF ALIGHTING GEAR - 10M, B&W, SD. SERV CHG $3.00
FROM THE SERIES, AIRCRAFT ALIGHTING GEAR. INSPECTION ROUTINE APPLICABLE TO ANY TYPE TRICYCLE LANDING GEAR.

INSPECTION OF MINOR ASSEMBLIES - 16M, B&W, SD. SERV CHG $3.00
SHOWS HOW TO INSPECT A MINOR ASSEMBLY IN DETAIL, HOW TO READ RIVET SPECIFICATIONS, AND HOW TO INSPECT RIVETS.

INSPECTION OF SHEET METAL PARTS - 20M, B&W, SD. SERV CHG $3.00
THIS FILM SHOWS HOW TO USE INSPECTION WORK SHEETS, HOW TO PLAN AN INSPECTION ROUTINE, HOW TO INSPECT A SHEET METAL PART IN DETAIL, HOW TO MAKE VISUAL INSPECTION AND HOW TO MAKE SPOT CHECKS.

INSTALLATION - 17M, B&W, SD. SERV CHG $3.00
FROM THE SERIES, ENGINE CHANGE. SHOWS THE SAFETY PRECAUTIONS TO BE OBSERVED WHEN INSTALLING AN ENGINE, HOW TO INSPECT ENGINE MOUNT, CONTROLS, AND FIREWALL, HOW TO CONNECT CONTROLS AND ATTACHMENTS, HOW TO GROUND TEST THE ENGINE, AND HOW TO PREPARE FOR CHECK FLIGHT.

INSTRUMENT FLIGHT CONTROL--A SERIES--SEE FOLLOWING TITLES
FADE PARALLEL SYSTEM AND CLOSE-IN PROCEDURE...THE 90 DEGREE METHOD ORIENTATION...THE TRUE FLIGHT SYSTEM ORIENTATION...RADIO NAVIGATION BRACKETING UNKNOWN BEAM.

INTEGRATED LANDING AIDS, PART 1 - 25M, C, SD. SERV CHG $5.50
PRESENTS INFORMATION TO QUALIFIED PILOTS ON THE BASIC PRINCIPLES AND USE OF ILS-INSTRUMENT LANDING SYSTEM-AND GCA-GROUND CONTROL APPROACH-AND THE MANNER IN WHICH THEY ARE INTEGRATED TO PROVIDE MAXIMUM SAFETY. THE FILM DOES NOT PRESENT A SPECIFIC METHOD ON HOW TO USE THESE LANDING AIDS.

INTEGRATED LANDING AIDS, PART 11 - 23M, C, SD. SERV CHG $5.00
PRESENTS INFORMATION TO QUALIFIED PILOTS ON THE BASIC PRINCIPLES OF THE VARIOUS SYSTEMS OF HIGH INTENSITY LIGHTING-INCLUDING THE SLOPE LINE APPROACH LIGHTING SYSTEM-AND FIDO-FOG-INTENSIVE DISPERSAL OF. THE MANNER OF INTEGRATION OF THE VARIOUS LANDING AIDS TO PROVIDE MAXIMUM SAFEGUARDS IS EMPHASIZED.

INTERMEDIATE ACROBATICS--A SERIES--SEE FOLLOWING TITLES
ACROBATIC CHECKS...CHANDELLES...IMMELMAN...INVERTED SPINS...LOOPS...PRECISION SPIN...SLOW ROLL

INTERPRETATIONS AND VALUES - 30M, B&W, SD. $3.50
THIS FILM FIRST SHOWS ALL THE SCENES OF VARIOUS ANGLES, EXACTLY AS SHOT FOR A DRAMATIC SEQUENCE. FOLLOWING THIS ARE THREE INTERPRETATIONS OF EDITING THE SEQUENCE BY DIFFERENT EDITORS. THIS FILM IS A FITTING SECOND STEP IN APPRECIATION. IT DOES NOT REQUIRE TOO MUCH PREVIOUS KNOWLEDGE OF THE CINEMATIC ART. IT IS A GOOD EXAMPLE OF HOW PERSONAL AN EXPERIENCE IS THE VIEWING OF A MOVIE, HOW EACH INDIVIDUAL PUTS HIS OWN INTERPRETATION ON THE VARIOUS DRAMATIC VALUES, AND, ILLUSTRATES HOW MUCH CONTROL THE EDITOR HAS OVER DRAMATIC CONSTRUCTION.

INTRODUCING THE BRASSES - 23M, B&W, SD. SERV CHG $4.75
FROM THE SERIES, MUSIC FOR YOUNG PEOPLE. DESCRIBES AND ILLUSTRATES THE MUSICAL CHARACTERISTICS AND OPERATING PRINCIPLES OF A BRASS QUINTET. A YOUNG AUDIENCE IS INTRODUCED TO A TRUMPET, TROMBONE, FRENCH HORN, AND TUBA. IN ADDITION TO SHORT AND FAMILIAR PASSAGES, FIVE COMPOSITIONS ARE PERFORMED TO DEMONSTRATE THE VOICES OF THE VARIOUS INSTRUMENTS.

INTRODUCING THE WOODWINDS - 23M, B&W, SD. SERV CHG $4.75
FROM THE SERIES, MUSIC FOR YOUNG PEOPLE. DESCRIBES AND ILLUSTRATES THE MUSICAL CHARACTERISTICS AND OPERATING PRINCIPLES OF THE INSTRUMENTS OF A WOODWIND QUINTET. A YOUNG AUDIENCE IS INTRODUCED TO A FLUTE, PICCOLO, BASSOON, OBOE, CLARINET AND THE FRENCH HORN. FOUR COMPOSITIONS ARE PERFORMED.

INTRODUCTION TO RADAR - 26M, B&W, SD. SERV CHG $3.25
AN ELEMENTARY EXPLANATION OF RADAR COVERING THE BASIC THEORY ON WHICH IT OPERATES AND THE DIFFERENT KINDS--DETECTION, SEARCH, AIRCRAFT WARNING, HOMING, NAVIGATIONAL AID. INCLUDES A BRIEF DESCRIPTION OF P.P.I. ENDS SETTING UP A PROBLEM AND SOLVING IT BY RADAR.

INTRODUCTION TO SKIN DIVING - 27M, C, SD. $6.00 - SALE $200
A FILM ON HOW TO STAY ALIVE UNDER WATER. IT INSTRUCTS THE SKIN DIVER AND THE USER OF UNDERWATER BREATHING APPARATUS IN THE SUBJECT OF UNDERWATER SAFETY. THIS IS AN EXCELLENT SUBJECT FOR GYM CLASSES, SKIN DIVING CLUBS, PUBLIC LIBRARIES, ETC.

INVERTED SPINS - 10M, B&W, SD. SERV CHG $3.00
FROM THE SERIES, INTERMEDIATE ACROBATICS. POINTS OUT THE DIFFERENCE BETWEEN THE ACCIDENTAL SPIN AND THE INVERTED SPIN, THE PROCEDURE AND PRECAUTIONS TO BE TAKEN, AND THE RECOVERY. A NUMBER OF ERRORS IN RECOVERY ARE ILLUSTRATED AND THE CORRECT PROCEDURE IS SHOWN.

ITS GONE - 13M, C, SD. $4.50 - SALE $120
ILLUSTRATES THE MODERN METHOD OF REMOVING ANNOYING BODY HAIR THROUGH ELECTROLOGY.

ITURBI - PROGRAM 1 - 10M, B&W, SD. $3.00
PROGRAM 1 - FROM THE SERIES, ARTIST FILMS. SEVILLA BY ALBENIZ AND FANTASIE-IMPROMPTU BY CHOPIN PERFORMED ON THE PIANO BY JOSE ITURBI.

ITURBI - PROGRAM 2 - 10M, B&W, SD. $3.00
PROGRAM 2 - FROM THE SERIES, ARTIST FILMS. JOSE ITURBI PLAYS THREE SHORT PIECES BY RAMESU ON THE HARPSICHORD. HE ALSO PLAYS LISZTS HUNGARIAN RHAPSODY NO 11 ON THE PIANO. ITURBI GIVES A BRIEF EXPLANATION OF THE HARPSICHORD. CAMERA CLOSE-UPS THROUGHOUT ALL THE COMPOSITIONS GIVE INSIGHT INTO THE ARTISTS TECHNIQUE.

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JET PROPULSION - 12M, C, SD. SERV CHG $4.00
FILM POINTS OUT THAT TODAYS CONVENTIONAL PLANE USES IMPROVED VERSIONS OF THE SAME RECIPROCATING ENGINE USED BY THE WRIGHT BROTHERS 1903 AIRPLANE. THIS TYPE ENGINES LIMITATIONS ARE SHOWN. NEWTONS THIRD LAW OF MOTION IS EXPLAINED TO SHOW HOW IT MAY BE USED TO PROPEL AIRCRAFT. THE CONSTRUCTION AND OPERATION OF THE JET ENGINE AND ITS SIMILARITY, TO THE TURBO-SUPERCHARGER ARE EXPLAINED. THE FILM SHOWS LIVE ACTION SHOTS OF THE P-80 SHOOTING STAR REVEALING ITS FLIGHT CHARACTERISTICS AND HOW THESE DIFFER FROM CONVENTIONAL TYPE AIRCRAFT.

JOURNEY TO DANALI - 10M, B&W, SD. $3.00
A TRIP UP THE ALASKA RAILROAD FROM ANCHORAGE TO MT. MC KINLEY, OR, AS IT IS KNOWN TO THE ALASKANS, DENALI. THE TOUR GOES THROUGH FAIRBANKS AND THE MATANUSKA VALLEY WHERE THE DUST BOWL FARMERS, SETTLED BY THE U. S. GOVERNMENT IN THIS BEAUTIFUL SECTION, HAVE BUILT A THRIVING COOPERATIVE COMMUNITY.

JUST WHAT IS GENERAL SEMANTICS - 30M, B&W, SD. SERV CHG $4.75
FROM THE SERIES, TALKING SENSE. DR. LEE INDICATES THAT IN THE BROADEST SENSE GENERAL SEMANTICS IS CONCERNED WITH THE FACTORS IN COMMUNICATION THAT LEAD TO MISUNDERSTANDING, TENSION, AND CONFLICT. HIS SPECIFIC INTEREST IS IN THE KINDS OF THINGS THAT HAPPEN BETWEEN PEOPLE THAT PRODUCE TROUBLE BECAUSE OF THE WAY THEY TALK. DR. LEE IDENTIFIES AND DISCUSSES FOUR ELEMENTS GENERALLY ASSOCIATED WITH MOST HUMAN BEHAVIOR - A HAPPENING, AN IMPACT, EVALUATING, AND TALKING OR ACTING.

K

KEEP IT FLYING - PART 1 - 10M, B&W, SD. SERV CHG $3.00
FROM THE SERIES, PRIMARY FLIGHT TRAINING. SHOWS THE RELATION OF ANGLE OF ATTACK TO LIFT AND STALLING, WHAT APPARENT WEIGHT INVOLVES AND HOW TO TELL IF IT IS INCREASING. IT STRESSES GETTING THE FEEL OF THE PLANE IN STALLING ATTITUDES. ROBERT TAYLOR PORTRAYS THE INSTRUCTOR AND NARRATOR.

- REACH INTO SILENCE - 15M. C. SD. LOAN - SALE $120.00
- RETURN. THE - 40M. B&W. SD. SERV CHG. $3.75
- THAT MEN MAY FLY - 23M. B&W. SD. SERV CHG $3.00
- TOMORROW MAY BE DYING - 23M. B&W. SD. $3.00 - SALE $75.00
- TOO YOUNG TO SAY - 15M. C. SD. $4.50 - SALE $120
- YOUR CHILDREN AND YOU - 26M. B&W. SD. $3.25
- YOUR COUNTY HEALTH DEPARTMENT - 16M. C. SD. $4.50 - SALE $120

HEARING. SUBJECT OF --SEE FOLLOWING
- GOOD SPEECH FOR GARY - 22M. C. SD. $5.00
- GOOD SPEECH FOR GARY - 22M. C. SD. $5.00
- LIFE SITUATION FILMS--A SERIES - 5M. B&W. SD.
- LIFE SITUATION FILMS--A SERIES - 5M. C. SD.
- LISTENING EYES - 19M. C. SD. $5.00 - SALE $155.00
- REACH INTO SILENCE - 15M. C. SD. LOAN - SALE $120.00
- THURSDAYS CHILDREN - 22M. B&W. SD. SERV CHG $3.00
- TOO YOUNG TO SAY - 15M. C. SD. $4.50 - SALE $120.00

HYDRAULICS. SUBJECT OF--SEE THE FOLLOWING
- AIRPLANE PROPELLERS--A SERIES--SEE FOLLOWING TITLES
- BASIC HYDRAULICS - 9M. C. SD. SERV CHG $4.00
- ELEMENTARY HYDRAULICS--A SERIES--SEE FOLLOWING TITLES
- FLUID FLOW IN HYDRAULIC SYSTEMS - 28M. C. SD. SERV CHG $5.50

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INTERNATIONAL RELATIONS. SUBJECT OF--SEE THE FOLLOWING
- BEHIND THE TOURIST CURTAIN - 20M. B&W. SD. SERV CHG $3.00
- CAMPUS UNITED NATIONS - 17M. B&W. SD. $3.00 - SALE $75
- MODEL UNITED NATIONS - 8M. B&W. SD. $3.00 SALE $45
- PEOPLES CHARTER - 17M. B&W. SD. $3.00
- POINT OF IMPACT - 13M. B&W. SD. $3.00 - SALE $60
- WORLD IS RICH. THE - 43M. B&W. SD. $4.00

JOURNALISM. SUBJECT OF--SEE THE FOLLOWING
- SMALL TOWN EDITOR - 17M. B&W. SD. $3.00

LAW. SUBJECT OF--SEE THE FOLLOWING
- PRACTICE COURTROOM--FELL VS MANLOCK - 7M. B&W. SD. $3.00 - SALE $30
- PROPERTY LINES - 22M. B&W. SD. $3 - SALE $75

LITERATURE. SUBJECT OF--SEE THE FOLLOWING
- BLACK CAT. THE - 15M. C. SD. $4.50 - SALE $120
- FRIENDLY GIANT. THE--A SERIES
- OCCURRENCE AT OWL CREEK BRIDGE. AN - 17M. C. SD. $4.50 - SALE $120
- ON SEEING FILM. FILM AND LITERATURE - 17M. B&W. SD. $3 - SALE $90
- STORY TELLERS OF THE CANTERBURY TALES - 17M. C. SD. $4.50-SALE $155

LOAN. FILMS FOR --SEE FOLLOWING
- SPIRIT OF TROY - 11M. C. SD. LOAN
- TROJAN TEMPO - 17M. C. SD. LOAN
- UNIVERSITY IS A TEACHER. A - 30M. B&W. SD. LOAN

M

MANUFACTURING. SUBJECT OF--SEE THE FOLLOWING
- AIRPLANE STRUCTURES--A SERIES
- ALUMINUM FABRICATING PROCESSES - 20M. B&W. SD. SERV CHG $3.00
- ALUMINUM--MINE TO METAL - 17M. B&W. SD. SERV CHG $3.00
- BEAUTY BY THE YARD - 20M. C. SD. SERV CHG $5.00
- BEHIND THE SHOP DRAWING - 18M. B&W. SD. $3
- BETTER WORK METHODS - 11M. B&W. SI. $3.00
- BLANKING AND PUNCHING - 20M. B&W. SD. $3
- CONVEYORS FOR PARTS. ASSEMBLIES - 20M. B&W. SD. $3 - SALE $75
- FORMING METHODS - METALS - 40M. B&W. SD. $4.00
- MADE IN U.S.A. - 10M. B&W. SD. $3.00
- MOTION AND TIME STUDY - 9M. B&W. SD. $3.00 - SALE $45
- PIG IRON TO STEEL - 15M. B&W. SI. $3.00
- PLASTICS FROM PETROLEUM - 16M. C. SD. $4.50
- PROSPECTS UNLIMITED - 27M. B&W. SD. SERV CHG $3.25
- STORY OF TENITE. THE - 30M. C. SD. SERV CHG $6.00
- VELOCITY OF CHEMICAL REACTIONS - 10M. B&W. SD. $3.00

MAPS. SUBJECT OF--SEE THE FOLLOWING
- AIRPLANE CHANGES OUR WORLD MAP - 11M. B&W. SD. SERV CHG $3.00
- NAVIGATION -- A SERIES

MATHEMATICS. SUBJECT OF--SEE THE FOLLOWING
- MOTIVATING THE CLASS - 19M. B&W. SD. $3
- UNDERSTANDING NUMBERS--A SERIES

MECHANICAL ENGINEERING. SUBJECT OF--SEE THE FOLLOWING
- BEHIND THE SHOP DRAWING - 18M. B&W. SD. $3
- BENDING AND CURVING - 30M. B&W. SD. $3.50
- BLANKING AND PUNCHING - 20M. B&W. SD. $3.50
- BUILDING A BOX BEAM SPAR - 21M. B&W. SD. SERV CHG $3.00
- BUILDING A WOODEN RIB - 19M. B&W. SD. SERV CHG $3.00
- COUNTERSINKING. COUNTERBORING. AND SPOT - 20M. B&W. SD. RENTAL $3
- CUTTING AN EXTERNAL THREAD - 12M. B&W. SD. $3.00
- CUTTING A KEYWAY - 13M. B&W. SD. $3.00
- CUTTING A TAPER - 10M. B&W. SD. $3.00
- CUTTING KEYWAYS - 15M. B&W. SD. $3.00
- CUTTING THREADS WITH TAPS AND DIES - 20M. B&W. SD. $3
- DRILLING IN METAL. WOOD. & PLASTICS - 23M. B&W. SD. SERV CHG $3
- DRILLING TO A LAYOUT - 15M. B&W. SD. $3.00
- DRILLING. BORING AND REAMING - 10M. B&W. SD. $3.00
- FIXED GAUGES - 17M. B&W. SD. $3.00
- FORMING METHODS - METALS - 40M. B&W. SD. $4.00
- HEIGHT GAUGES AND TEST INDICATORS - 10M. B&W. SD. $3.00
- MICROMETER - 15M. B&W. SD. $3.00
- MOTION AND TIME STUDY - 9M. B&W. SD. $3.00 - SALE $45
- STEEL RULE - 14M. B&W. SD. $3.00
- STORY OF TENITE. THE - 30M. C. SD. SERV CHG $6.00

MEDICINE. SUBJECT OF--SEE THE FOLLOWING
- CONTROL OF FILARIASIS - 15M. C. SD. $4.50 - SALE $120 FRENCH
- CONTROL OF FILARIASIS IN TAHITI - 15M. C. SD. $4.50 - SALE $120
- CONTROL OF NON-PERIODIC FILARIASIS - 21M. C. SD. $5 - SALE $155
- ELEMENTARY LAB TECHNIQUES IN BACTERIOLOGY - 20M. C. SD. $5 SALE $155
- ITS GONE - 13M. C. SD. $4.50 - SALE $120
- PROCEDURES IN THE DIAGNOSIS OF - 32M. C. SD. $6 - SALE $175
- SAFE AIRMEN - 22M. B&W. SD. SERV CHG $3.00
- THAT MEN MAY FLY - 23M. B&W. SD. SERV CHG $3.00
- THINNEST SLICE. THE - 21M. B&W. SD. $3 - SALE $75
- TOMORROW MAY BE DYING - 23M. B&W. SD. $3.00 - SALE $75.00

MENTAL HEALTH. SUBJECT OF--SEE THE FOLLOWING
- ANGRY BOY - 33M. B&W. SD. $3.50
- BEHIND THE TOURIST CURTAIN - 20M. B&W. SD. SERV CHG $3.00
- CHILDREN OF TRAGEDY - 21M. B&W. SD. SERV CHG $3.00
- FEELING OF HOSTILITY - 31M. B&W. SD. $3.50
- FEELING OF REJECTION - 21M. B&W. SD. $3
- HAVE I TOLD YOU LATELY I LOVE YOU - 16M. B&W. SD. $3 SALE $60.00
- HEAD OF THE HOUSE - 40M. B&W. SD. $4.00
- LIGHT FOR JOHN. A - 22M. B&W. SD. $3.00 - SALE $75
- OVERDEPENDENCY - 30M. B&W. SD. $3.50
- PROBLEMS OF PUPIL ADJUSTMENT - 20M. B&W. SD. $3
- PROBLEMS OF PUPIL ADJUSTMENT - 19M. B&W. SD. $3
- RESTORATION BEGINS - 20M. B&W. SD. SERV CHG $3.00
- ROLE PLAYING THE PROBLEM STORY - 25M. B&W. SD. $3.25 - SALE $90
- SCHOOL SOCIAL WORKER. THE - 25M. B&W. SD. SERV CHG $3.25 - SALE $40
- SHADES OF GRAY - 66M. B&W. SD. $4.00
- THEY THINK FOR THEMSELVES - 23M. B&W. SD. $3. - SALE $90
- TOMORROW MAY BE DYING - 23M. B&W. SD. $3.00 - SALE $75.00
- UNCONSCIOUS MOTIVATION - 40M. B&W. SD. $3.75

METALS. SUBJECT OF--SEE THE FOLLOWING
- ALUMINUM FABRICATING PROCESSES - 20M. B&W. SD. SERV CHG $3.00
- ALUMINUM--MINE TO METAL - 17M. B&W. SD. SERV CHG $3.00
- FABRICATING METAL AIRCRAFT - 14M. B&W. SD. SERV CHG $3.00
- FORMING METHODS - METALS - 40M. B&W. SD. $3.75
- HEAT TREATMENT OF STEEL - 20M. B&W. SD. $3

MODEL AIRPLANES. SUBJECT OF--SEE THE FOLLOWING
- AIRPLANES--METALS. FUELS & LUBRICANTS-37M. B&W. SD. SERV CHG $3.75
- FROM LITTLE WINGS - 14M. C. SD. SERV CHG $4.50
- YOUTH TRAINS FOR AVIATION - 8M. B&W. SD. SERV CHG $3.00

MOTION PICTURES. SUBJECT OF--SEE THE FOLLOWING
- ALCHEMIST IN HOLLYWOOD - 30M. B&W. SD. $3.50
- BASIC PORTRAITURE LIGHTING - 13M. B&W. SD. $3.00
- BASIC PRINCIPLES OF FILM EDITING - 8M. B&W. SD. SALE APPLY
- BIOGRAPHY OF A MOTION PICTURE CAMERA - 22M. B&W. SD. $3
- CINEMATOGRAPHER. THE - 10M. B&W. SD. $3.00
- COSTUME DESIGNER. THE - 10M. B&W. SD. $3.00
- FORMS IN SPACE - 21M. B&W. SD. $3 - SALE $75
- GRIFFITH REPORT - 7M. B&W. SD. $3.00 - SALE $30
- HISTORY BROUGHT TO LIFE - 10M. B&W. SD. $3.00
- INTERPRETATIONS AND VALUES - 30M. B&W. SD. SALE APPLY $3.50
- LETS GO TO THE MOVIES - 10M. B&W. SD. $3.00
- MOMENTS IN MUSIC - 10M. B&W. SD. $3.00
- MOVIES ARE ADVENTURE - 10M. B&W. SD. $3.00
- PHOTOGRAPHER. THE - 26M. B&W. SD. $3.25
- SCHOOL. THE - 21M. B&W. SD. $3
- SCREEN DIRECTOR. THE - 10M. B&W. SD. $3.00
- SCREEN WRITER. THE - 10M. B&W. SD. $3.00
- SOUND MAN. THE - 10M. B&W. SD. $3.00
- THEATRICAL FILM SYMPOSIUM--A SERIES

MOTION PICTURES--EQUIPMENT. SUBJECT OF--SEE THE FOLLOWING
- BIOGRAPHY OF A MOTION PICTURE CAMERA - 22M. B&W. SD. $3
- CINEMATOGRAPHER. THE - 10M. B&W. SD. $3.00

MUSIC. SUBJECT OF--SEE THE FOLLOWING
- ARTISTS FILMS--A SERIES
- B FLAT CLARINET. THE - 9M. B&W. SD. $3.00
- BALLAD OF IDYLLWILD - 21M. C. SD. SERV CHG $5.00
- MOMENTS IN MUSIC - 10M. B&W. SD. $3.00
- MUSIC EDUCATION WORKSHOP - 10M. C. SD. $4.00 - SALE $65
- MUSIC FOR YOUNG PEOPLE -- A SERIES
- MUSIC FROM THE MOUNTAINS - 19M. C. SD. SERV CHG $5.00
- MUSIC IN AMERICA - 17M. B&W. SD. $3.00
- TROJAN TEMPO - 17M. C. SD. LOAN
- VRONSKY & BABIN - 10M. B&W. SD. $3.00
- VRONSKY & BABIN - 10M. B&W. SD. $3.00

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NARCOTICS. SUBJECT OF--SEE THE FOLLOWING
- TOMORROW MAY BE DYING - 23M. B&W. SD. $3.25 - SALE $75.00

NAVIGATION. SUBJECT OF--SEE THE FOLLOWING
- EARTH. THE - 16M. B&W. SD. SERV CHG $3.00
- GYRO COMPASS--A SERIES
- INSTRUMENT FLIGHT CONTROL--A SERIES
- INTEGRATED LANDING AIDS. PART 11 - 23M. C. SD. SERV CHG $5.00
- INTEGRATED LANDING AIDS. PART 1 - 25M. C. SD. SERV CHG $5.50
- INTERPRETATION OF BEARING. LINES OF - 19M. B&W. SD. SERV CHG $3.00
- NAVIGATION -- A SERIES
- WEATHER FOR NAVIGATION - 9M. B&W. SD. SERV CHG $4.00

NEWSREEL. SUBJECT OF--SEE THE FOLLOWING
- MARCH OF THE MOVIES - 20M. B&W. SD. $3
- POLAND. THE COUNTRY AND THE PEOPLE - 20M. B&W. SD. $3
- WORLDS LARGEST TELESCOPE REFLECTOR - 10M. B&W. SD. $3.00

P

PENOLOGY. SUBJECT OF--SEE THE FOLLOWING
- ANGRY BOY - 33M. B&W. SD. $3.50
- DOOMED. THE - 22M. B&W. SD. $3.25 - SALE $75
- PLACE IN THE SUN. A - 14M. B&W. SD. $3.00 - SALE $75
- PROTEST. THE - 25M. B&W. SD. $3.25 - SALE $90.
- TOMORROW MAY BE DYING - 23M. B&W. SD. $3.00 - SALE $75.00

PERSONNEL TRAINING. SUBJECT OF--SEE THE FOLLOWING
- ENGINEERING OF AGREEMENT - 22M. B&W. SD. $3.00
- PERSON TO PERSON COMMUNICATION - 14M. B&W. SD. $3.00
- SMALL WORLD OF MR. PENNYFEATHER. THE - 44M. C. SD. SERV CHG $6.00

A

ABC OF G. THE - 19M. C. SD. SERV CHG $5.00
PRESENTS THE PROBLEM OF HIGH ACCELERATION AND ITS PHYSICAL EFFECTS ON PILOTS. STUDIES THE EFFECT OF G ON THE PILOT IN DIFFERENT FLIGHTS. DEMONSTRATES THE ACCELEROMETER AND THE CENTRIFUGE. GIVES SOME SUGGESTIONS FOR ADVANCING THE BLACKOUT THRESHOLD.

ACROBATIC CHECKS - 19M. B+W. SD. SERV CHG $4.00
FROM THE SERIES. INTERMEDIATE ACROBATICS. JOE STUDENT DEMONSTRATES THE PROCEDURE FOR ACROBATIC CHECKS MAKING A FLIPPER TURN. LOOP. RIGHT SLOW ROLL. RIGHT CHANDELLE. AND RIGHT AND LEFT PRECISION SPIN. STRESSES THE IMPORTANCE OF THE CHECK AND STAYING WITHIN THE CHECK RANGE.

ACROBATICS - 19M. B+W. SD. SERV CHG $4.00
SHOWS A BRIEF SCENE OF A DUEL BETWEEN TWO FIGHTER PLANES. THROUGH THE USE OF ANIMATION. SHOWS HOW THE CONTROLS OF A PLANE OPERATE AND THEIR EFFECT ON THE ATTITUDE OF THE PLANE. DEMONSTRATES THE USE OF CONTROLS ON A SLOW ROLL. LOOP. SNAP ROLL. HALF ROLL AND REVERSE. VERTICAL REVERSE AND IMMELMAN TURN. ALSO SEE INTERMEDIATE ACROBATICS.

ADJUSTMENT OF THE HARNESS - 12M. B+W. SD. SERV CHG $4.00
FROM THE SERIES. PARACHUTES. SHOWS HOW THE PARACHUTE HARNESS IS FITTED TO THE INDIVIDUAL AND THEN SEWED SO THAT IT WILL STAY IN ADJUSTMENT.

ADJUSTMENTS AFTER FLIGHT CHECK - 19M. B+W. SD. SERV CHG $4.00
SHOWS SOME CAUSES OF NOSE-HEAVINESS. TAIL-HEAVINESS. YAWING. TORQUE TENDENCY. ROUGH PROPELLER. AND GROUND LOOPING. HOW TO DETERMINE THE PARTICULAR CAUSE OF THESE TROUBLES. AND HOW TO MAKE THE NECESSARY ADJUSTMENTS.

AERIAL MAP READING - 22M. B+W. SD. SERV CHG $5.00
FROM THE SERIES. NAVIGATION. HOW TO READ AERIAL MAPS AND THE USE OF LANDMARKS AND FEATURES IN FINDING POSITION ARE STUDIED. BRIEFLY TOUCHES ON CHANGING SEASONS. FEATURES TO LOOK FOR AT SEA. NIGHT FLYING. AND FLYING WHEN LOST. PLOTS A COURSE FROM CORPUS CHRISTI TO SABINE PASS. DETERMINES ETA USING LANDMARKS IN THE DEMONSTRATION.

AERODYNAMICS--A SERIES--SEE FOLLOWING TITLES
AIR FLOW...FORCES ACTING ON AN AIR FOIL.

AEROLOGY--A SERIES--SEE FOLLOWING TITLES
AIR MASSES AND FRONTS...THE COLD FRONT...FLYING THE WEATHER MAP...FOG...ICE FORMATION ON AIRCRAFT...THE OCCLUDED FRONTS...THUNDERSTORMS...THE WARM FRONT.

AIR DEFENSE - 27M. B+W. SD. SERV CHG $5.00
SHOWS THE VITAL ROLE PLAYED BY VOLUNTEERS OF THE GROUND OBSERVER CORPS WHO WORK TOGETHER WITH THE U. S. AIR FORCE AIR DEFENSE COMMAND TO DEFEND OUR NATION AGAINST SUDDEN DESTRUCTION FROM THE AIR.

AIR FLOW - 18M. B+W. SD. SERV CHG $4.00
FROM THE SERIES. AERODYNAMICS. EXPLAINS TURBULENCE AND SKIN FRICTION THROUGH THE FLOW OF SMOKE OVER VARIOUS SOLID SHAPES AND FORMS. ALSO EXPLAINS AND DEFINES THE ANGLE OF ATTACK. POINT OF STALL. DRAG. AND LIFT THROUGH THE USE OF SMOKE STREAMS.

AIR IN ACTION - 10M. B+W. SD. SERV CHG $4.00
DEMONSTRATES THE SCIENCE OF AERODYNAMICS BY EXPLAINING SIMPLE PARLOR TRICKS IN TERMS OF SCIENTIFIC KNOWLEDGE AND APPLICATION OF THAT KNOWLEDGE TO EVERYDAY LIVING. AIR RESISTANCE IS ANALYZED. AND APPLICATIONS TO COMMON EXPERIENCES ARE EXPLAINED. AN INTERESTING SEQUENCE. FILMED IN THE GIANT WIND TUNNEL OF THE ARMY AIR FORCES AT WRIGHT FIELD. SHOWS AIR CURRENTS AROUND A MODEL. THE BREAKING UP OF STREAM LINES BEHIND THE MODEL. AND THE DEVELOPMENT OF THE MOST EFFICIENT AERODYNAMIC SHAPE.

AIR MASSES AND FRONTS - 26M. C. SD. SERV CHG $6.00
FROM THE SERIES. AEROLOGY. DESCRIBES THE TROPOSPHERE. THE FORMATION OF CLOUDS. WARM AND COLD FRONTS AND CYCLONES. AND EXPLAINS THE CONDITIONS RESPONSIBLE FOR DIFFERENT KINDS OF WEATHER.

AIR POWER IS PEACE POWER - 27M. B+W. SD. SERV CHG $5.00
SHOWS SOME OF THE OPERATIONS OF SCHEDULED AIR CARRIERS. DEMONSTRATES THE FLIGHT CHARACTERISTICS OF THE CONSTELLATION AS WELL AS AN INDICATION OF SOME OF THE EXTENSIVE AND INTENSIVE TESTING THROUGH WHICH THIS NEW TYPE OF TRANSPORT WAS PUT DURING ITS DEVELOPMENT. WOVEN INTO THIS STORY IS THE PART CAPTAIN EDDIE RICKENBACKER PLAYED IN THE DRAMATIC DEVELOPMENT OF AVIATION.

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PRESENTS THE WHOLE FIELD OF OCCUPATIONS IN THE AIR TRANSPORTATION INDUSTRY. FROM THE HIGHLY TRAINED FLIGHT AND MECHANICAL PERSONNEL TO THE CLERICAL JOBS WHICH TAKE BUT A SMALL AMOUNT OF INSTRUCTION TO QUALIFY. THE REQUIREMENTS AND TRAINING NECESSARY TO QUALIFY FOR THE POSITIONS OF PILOT. METEOROLOGIST. AND FLIGHT DISPATCHER ARE COVERED. AS ARE THE RESPONSIBILITIES WHICH ACCOMPANY THEIR JOBS.

AIRBORNE MAGNETOMETER. THE - 24M. B+W. SD. SERV CHG $5.00
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AIRCRAFT ALIGHTING GEAR--A SERIES--SEE FOLLOWING
ASSEMBLY OF MAIN ALIGHTING GEAR SHOCK STRUT...INSPECTION OF ALIGHTING GEAR...MAINTENANCE OF ALIGHTING GEAR...REMOVAL OF NOSE ALIGHTING GEAR.

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DEMONSTRATES THE PROCEDURES FOR THE 50-HOUR INSPECTION OF THE AIRPLANE INSTRUMENTS IN A B-17. THE PROCEDURES DEMONSTRATED ARE APPLICABLE TO MANY OTHER TYPES OF AIRCRAFT.

AIRCRAFT WELDING - 18M. B+W. SD. SERV CHG $4.00
DEMONSTRATES THE PROPER METHOD OF SETTING UP WELDING APPARATUS. LIGHTING THE TORCH. DIFFERENT TYPES OF FLAMES. AND THE EFFECT OF EACH ON STEEL. THE CORRECT METHOD OF MAKING RIPPLES AND BEADS IS SHOWN AS WELL AS HOW TO TURN OFF. TO CARE FOR. AND TO PUT AWAY THE WELDING APPARATUS.

AIRPLANE - 17M. B+W. SD. SERV CHG $4.00
FROM THE SERIES. PREFLIGHT INSPECTION. SHOWS THE NECESSITY FOR CAREFUL AND THOROUGH INSPECTION. HOW TO USE THE CIRCLE METHOD TO GIVE A COMPLETE AND SYSTEMATIC INSPECTION AND HOW EACH PART--LANDING GEAR. WINGS. FUSELAGE. TAIL SURFACES. CABIN. CONTROLS. INSTRUMENTS--IS INSPECTED.

AIRPLANE CHANGES OUR WORLD MAP - 11M. B+W. SD. SERV CHG $4.00
TRACES THE EVOLUTION OF WORLD MAP CONCEPTS FROM ANCIENT TIMES TO THE AIR AGE. CONSIDERS EARLY PROBLEMS OF MAP PROJECTION DISTORTION. AND REVIEWS PROJECTIONS OF MERCATOR. MOLLWEIDE. AND GOODE. EMPHASIZES. WITH IMPRESSIVE ANIMATION. THE CONCEPTS OF MODERN MAP MAKING AS INFLUENCED BY THE GREAT SHRINKAGE IN TIME-DISTANCE VALUES. THE SPEED OF AIRCRAFT. AND THEIR STRAIGHT LINE OF TRAVEL.

AIRPLANE HYDRAULIC BRAKES--BRAKE - 17M. B+W. SD. SERV CHG $4.00
AIRPLANE HYDRAULIC BRAKES--BRAKE ADJUSTMENT--HAYES AND GOODYEAR BRAKES - SHOWS THE PROPER STEPS TO ADJUST AND TEST THE HAYES AND GOODYEAR BRAKES.

AIRPLANE HYDRAULIC SYSTEMS--BC-1 - 13M. B+W. SD. SERV CHG $4.00
AIRPLANE HYDRAULIC SYSTEMS--BC-1 AIRPLANE - ILLUSTRATES HYDRAULIC SYSTEMS AS APPLIED TO THE RETRACTABLE LANDING GEAR. TO THE BRAKES. TO THE VARIABLE PITCH PROPELLER. THE PUMPS. RESERVOIRS. SPECIAL VALVES. AND THE OPERATING LEVERS ARE ALSO DIAGRAMMED AND EXPLAINED. SPECIFIC APPLICATION OF THESE PRINCIPLES TO THE BC-1 PLANE IS SHOWN.

AIRPLANE MECHANIC - 9M. B+W. SD. SERV CHG $3.00
PLANNED AS AN ORIENTATION FILM FOR BEGINNING AIRPLANE MECHANICS. SHOWS AND EXPLAINS THE SKILLS AND KNOWLEDGE REQUIRED TO MAKE SATISFACTORY INSPECTIONS AND REPAIRS. EMPHASIZES THE IMPORTANCE OF THOROUGHNESS. SKILL AND DEPENDABILITY.

AIRPLANE PROPELLERS--A SERIES--SEE FOLLOWING TITLES
DISASSEMBLING HUB AND BLADES OF CURTISS ELECTRIC PROPELLERS...PRINCIPLES AND TYPES OF PROPELLERS...PROPELLER INSTALLATION OF THE HAMILTON HYDROMATIC...REASSEMBLY AND ADJUSTING PARTS OF THE HAMILTON HYDROMATIC PROPELLER...REASSEMBLY OF HUB AND BLADES OF CURTISS ELECTRIC PROPELLERS...REMOVAL AND DISASSEMBLY OF CURTISS ELECTRIC PROPELLERS...SERVICING HAMILTON HYDROMATIC PROPELLERS.

AIRPLANE STRUCTURES--A SERIES--SEE FOLLOWING TITLES
ALIGHTING GEAR...MANUFACTURING METHODS...WING CONSTRUCTION

AIRPLANES AND HOW THEY FLY -10M. B+W. SD. SERV CHG $4.00
OFFERS AN ELEMENTARY EXPLANATION OF LIFT AND A BRIEF DISCUSSION OF THE BASIC CONTROLS-RUDDER. ELEVATORS. AILERONS-USED TO MANEUVER A PLANE IN FLIGHT. ALSO PRESENTS EXAMPLES OF THE RANGE IN TYPES AND SIZES OF PLANES.

AIRPLANES--METALS. FUELS + LUBRICANTS-37M. B+W. SD. SERV CHG $7.50
TELLS THE STORY OF HOW A GROUP OF BOYS INTERESTED IN BUILDING MODEL AIRPLANES LEARNED ABOUT THE METALS USED IN CONSTRUCTING AIRPLANES. THE PROGRESSIVE OPERATIONS OF BUILDING AN ALL-CARGO PLANE. THE THEORY OF FLIGHT AND LAWS OF AERODYNAMICS. AND THE IMPORTANCE OF LUBRICANTS IN THE MAINTENANCE AND OPERATION OF AIRCRAFT. FILM ENDS WITH A COMPETITIVE MEET OF MODEL PLANE BUILDERS AND THE PRESENTATION OF AWARDS TO THE WINNERS.

AIRPORT. THE - 11M. B+W. SD. SERV CHG $4.00
BRINGS TO VIVID LIFE THE FASCINATING ACTIVITIES AT A LARGE. BUSY COMMERCIAL AIRPORT. INSTRUCTIONS ARE RADIOED FROM THE CONTROL TOWER TO INCOMING PLANES. GIANT AIRLINERS LAND AND TAKE OFF. PASSENGERS PURCHASE TICKETS. FOOD IS PREPARED IN THE AIRPORT KITCHEN FOR EACH FLIGHT. BAGGAGE AND MAIL ARE MADE READY. AND A PRIVATE PILOT CHARTS HIS TRIP AND SUBMITS HIS FLIGHT PLAN.

ALCHEMIST IN HOLLYWOOD - 30M. B+W. SD. RENTAL $7.50
AN EXPLANATION OF THE CHEMISTRY OF PHOTOGRAPHY. IT WAS ORIGINALLY PRODUCED TO SHOW THIS ASPECT OF THE MOTION PICTURE INDUSTRY TO A MEETING OF THE SOUTHERN CALIFORNIA SECTION OF THE AMERICAN CHEMICAL SOCIETY.

ALIGHTING GEAR - 10M. B+W. SD. SERV CHG $4.00
FROM THE SERIES. AIRPLANE STRUCTURES. EXPLAINS THE WORKINGS OF ALIGHTING GEAR. SHOWS LOADS EXERTED. AND DEVICES THAT WARN PILOTS OF GEARS POSITION.

ALLISON ENGINE--INTRODUCTION AND - 8M. B+W. SD. SERV CHG $3.00
ALLISON ENGINE--INTRODUCTION AND CHARACTERISTICS OF V-1710 ENGINE - ILLUSTRATES PARTS OF V-1710 AND SHOWS THE VARIOUS PLANES WHICH USE IT. SHOWS THE SIX MAJOR SUB-ASSEMBLIES OF THE ENGINE.

ALPHABET. THE - 10M. C. SD. RENTAL $5.00
FROM THE SERIES. MILESTONES IN WRITING. TRACES THE EVOLUTION OF THE LETTERS A. B. C. + D. FROM THEIR SEMITIC ORIGIN THROUGH THEIR GREEK AND ROMAN FORMS. TO THE FORMS WE USE TODAY. FEATURES DR. FRANK BAXTER.

ALUMINUM FABRICATING PROCESSES - 20M. B+W. SD. SERV CHG $5.00
SHOWS THE PROCESSES OF FABRICATING METALLIC ALUMINUM INTO THE MANY SHAPES NECESSARY FOR ITS VARIOUS USES. MANY OF THE PRODUCTS MADE FROM ALUMINUM ARE PICTURED IN THE PROCESS OF PRODUCTION. THE IMPORTANCE OF RESEARCH IS EMPHASIZED.

FROM THE PRODUCTION. TROJAN TEMPO

- MECHANICAL ENGINEERING. SUBJECT OF--SEE THE FOLLOWING
  - BEHIND THE SHOP DRAWING - 18M. B+W. SD.
  - BENDING AND CURVING - 30M. B+W. SD.
  - BLANKING AND PUNCHING - 20M. B+W. SD.
  - BUILDING A BOX BEAM SPAR - 21M. B+W. SD.
  - BUILDING A WOODEN RIB - 19M. B+W. SD.
  - COUNTERSINKING. COUNTERBORING. AND SPOT - 20M. B+W. SD.
  - CUTTING A KEYWAY - 13M. B+W. SD.
  - CUTTING AN EXTERNAL THREAD - 12M. B+W. SD.
  - CUTTING A TAPER - 10M. B+W. SD.
  - CUTTING KEYWAYS - 15M. B+W. SD.
  - CUTTING THREADS WITH TAPS AND DIES - 20M. B+W. SD.
  - DRILLING. BORING AND REAMING - 10M. B+W. SD.
  - DRILLING IN METAL. WOOD. + PLASTICS - 23M. B+W. SD.
  - DRILLING TO A LAYOUT - 15M. B+W. SD.
  - FIXED GAUGES - 17M. B+W. SD.
  - FORMING METHODS - METALS - 40M. B+W. SD.
  - HEIGHT GAUGES AND TEST INDICATORS - 10M. B+W. SD.
  - MICROMETER - 15M. B+W. SD.
  - MOTION AND TIME STUDY - 9M. B+W. SD.
  - STEEL RULE - 14M. B+W. SD.
  - STORY OF TENITE. THE - 30M. C. SD.
  - VERNIERS - 20M. B+W. SD.

- MEDICINE. SUBJECT OF--SEE THE FOLLOWING
  - CONTROL OF FILARIASIS - 15M. C. SD.
  - CONTROL OF FILARIASIS IN TAHITI - 15M. C. SD.
  - CONTROL OF NON-PERIODIC FILARIASIS - 21M. C. SD.
  - ELEMENTARY LAB TECHNIQUES IN BACTERIOLOGY - 20M. C. SD.
  - ENCOURAGING THE RELEASE OF HOSTILITY - 15M. B+W. SD.
  - ITS GONE - 13M. C. SD.
  - MEET THE PROFESSOR - 30M. B+W. SD.
  - PROCEDURES IN THE DIAGNOSIS OF - 32M. C. SD.
  - SAFE AIRMEN - 22M. B+W. SD.
  - THAT MEN MAY FLY - 23M. B+W. SD.
  - THINNEST SLICE. THE - 21M. B+W. SD.
  - TOMORROW MAY BE DYING - 23M. B+W. SD.

- MENTAL HEALTH. SUBJECT OF--SEE THE FOLLOWING
  - ANGRY BOY - 33M. B+W. SD.
  - BEHIND THE TOURIST CURTAIN - 20M. B+W. SD.
  - CHILDREN OF TRAGEDY - 21M. B+W. SD.
  - FEELING OF HOSTILITY - 31M. B+W. SD.
  - FEELING OF REJECTION - 21M. B+W. SD.
  - HAVE I TOLD YOU LATELY I LOVE YOU - 16M. B+W. SD.
  - HEAD OF THE HOUSE - 40M. B+W. SD.
  - LIGHT FOR JOHN. A - 22M. B+W. SD.
  - OVERDEPENDENCY - 30M. B+W. SD.
  - PROBLEMS OF PUPIL ADJUSTMENT. PT 2 - 19M. B+W. SD.
  - RESTORATION BEGINS - 20M. B+W. SD.
  - ROLE PLAYING THE PROBLEM STORY - 25M. B+W. SD.
  - SCHOOL SOCIAL WORKER. THE - 25M. B+W. SD.
  - SHADES OF GRAY - 66M. B+W. SD.
  - THEY THINK FOR THEMSELVES - 23M. B+W. SD.
  - TOMORROW MAY BE DYING - 23M. B+W. SD.
  - UNCONSCIOUS MOTIVATION - 40M. B+W. SD.

- METALS. SUBJECT OF--SEE THE FOLLOWING
  - ALUMINUM FABRICATING PROCESSES - 20M. B+W. SD.
  - ALUMINUM--MINE TO METAL - 17M. B+W. SD.
  - FABRICATING METAL AIRCRAFT - 14M. B+W. SD.
  - FORMING METHODS - METALS - 40M. B+W. SD.
  - HEAT TREATMENT OF STEEL - 20M. B+W. SD.

- MODEL AIRPLANES. SUBJECT OF- SEE THE FOLLOWING
  - AIRPLANES--METALS. FUELS + LUBRICANTS-37M. B+W. SD.
  - FROM LITTLE WINGS - 14M. C. SD.
  - YOUTH TRAINS FOR AVIATION - 8M. B+W. SD.

- MOTION PICTURES. SUBJECT OF--SEE THE FOLLOWING
  - ALCHEMIST IN HOLLYWOOD - 30M. B+W. SD.
  - BASIC PORTRAITURE LIGHTING - 13M. B+W. SD.
  - BASIC PRINCIPLES OF FI-M EDITING - 8M. B+W. SD.
  - BIOGRAPHY OF A MOTION PICTURE CAMERA - 22M. B+W. SD.
  - CINEMATOGRAPHER. THE - 10M. B+W. SD.
  - COSTUME DESIGNER. THE - 10M. B+W. SD.
  - FORMS IN SPACE - 21M. B+W. SD.
  - GRIFFITH REPORT - 7M. B+W. SD.
  - HISTORY BROUGHT TO LIFE - 10M. B+W. SD.
  - INTERPRETATIONS AND VALUES - 30M. B+W. SD.
  - LETS GO TO THE MOVIES - 10M. B+W. SD.
  - MOMENTS IN MUSIC - 10M. B+W. SD.
  - MOVIES ARE ADVENTURE - 10M. B+W. SD.
  - PHOTOGRAPHER. THE - 26M. B+W. SD.
  - SCHOOL. THE - 21M. B+W. SD.
  - SCREEN DIRECTOR. THE - 10M. B+W. SD.
  - SCREEN WRITER. THE - 10M. B+W. SD.
  - SOUND MAN. THE - 10M. B+W. SD.
  - THEATRICAL FILM SYMPOSIUM--A SERIES

- MOTION PICTURES--EQUIPMENT. SUBJECT OF--SEE FOLLOWING
  - BIOGRAPHY OF A MOTION PICTURE CAMERA - 22M. B+W. SD.
  - CINEMATOGRAPHER. THE - 10M. B+W. SD.

- MUSIC. SUBJECT OF--SEE THE FOLLOWING
  - ARTISTS FILMS--A SERIES
  - B FLAT CLARINET. THE - 9M. B+W. SD.
  - BALLAD OF IDYLLWILD - 21M. C. SD.
  - MOMENTS IN MUSIC - 10M. B+W. SD.
  - MUSIC EDUCATION WORKSHOP - 10M. C. SD.
  - MUSIC FOR YOUNG PEOPLE -- A SERIES
  - MUSIC FROM THE MOUNTAINS - 19M. C. SD.
  - MUSIC IN AMERICA - 17M. B+W. SD.
  - MUSICAL FORMS--A SERIES
  - TROJAN TEMPO - 17M. C. SD.
  - VRONSKY + BABIN - 10M. B+W. SD.

N

- NARCOTICS. SUBJECT OF--SEE THE FOLLOWING
  - TOMORROW MAY BE DYING - 23M. B+W. SD.

- NAVIGATION. SUBJECT OF--SEE THE FOLLOWING
  - EARTH. THE - 16M. B+W. SD.
  - GYRO COMPASS--A SERIES
  - INSTRUMENT FLIGHT CONTROL--A SERIES
  - INTEGRATED LANDING AIDS. PART 1 - 25M. C. SD.
  - INTEGRATED LANDING AIDS. PART 11 - 23M. C. SD.
  - INTERPRETATION OF BEARING. LINES OF - 19M. B+W. SD.
  - NAVIGATION -- A SERIES
  - WEATHER FOR NAVIGATION - 9M. B+W. SD.

- NEWSREEL. SUBJECT OF--SEE THE FOLLOWING
  - MARCH OF THE MOVIES - 20M. B+W. SD.
  - POLAND. THE COUNTRY AND THE PEOPLE - 20M. B+W. SD.
  - WORLDS LARGEST TELESCOPE REFLECTOR - 10M. B+W. SD.
  - YEAR OF CHALLENGE - 28M. B+W. SD.

P

- PEACE. SUBJECT OF--SEE FOLLOWING--
  - NOT BY MIGHT - 15M. B+W. SD.
  - WHAT ARE THE REAL AIMS OF UNESCO - 30M. B+W. SD.
  - WHICH WAY TO PEACE - 30M. B+W. SD.

- PENOLOGY. SUBJECT OF--SEE THE FOLLOWING
  - ANGRY BOY - 33M. B+W. SD.
  - DOOMED. THE - 22M. B+W. SD.
  - OUTLAW COUNTRY - 14M. C. SD.
  - PLACE IN THE SUN. A - 14M. B+W. SD.
  - PROTEST. THE - 25M. B+W. SD.
  - TOMORROW MAY BE DYING - 23M. B+W. SD.

- PERSONNEL TRAINING. SUBJECT OF--SEE THE FOLLOWING
  - ENGINEERING OF AGREEMENT - 22M. B+W. SD.
  - PERSON TO PERSON COM[illegible]CATION - 14M. B+W. SD.
  - SMALL WORLD OF MR. PENNYFEATHER. THE - 44M. C. SD.

- PHILOSOPHY. SUBJECT OF--SEE THE FOLLOWING
  - HAST ANY PHILOSOPHY IN THEE - 14M. C. SD.
  - HAVE I TOLD YOU LATELY I LOVE YOU - 16M. B+W. SD.

- PHOTOGRAPHY. SUBJECT OF --SEE THE FOLLOWING
  - ALCHEMIST IN HOLLYWOOD - 30M. B+W. SD.
  - BASIC PORTRAITURE LIGHTING - 13M. B+W. SD.
  - BIOGRAPHY OF A MOTION PICTURE CAMERA - 22M. B+W. SD.
  - CINEMATOGRAPHER. THE - 10M. B+W. SD.
  - PHOTOGRAPHER. THE - 26M. B+W. SD.

- PHYSICS. SUBJECT OF--SEE THE FOLLOWING
  - ABC OF G. THE - 19M. C. SD.
  - AIR IN ACTION - 10M. B+W. SD.
  - ATOM. THE--A SERIES
  - BASIC HYDRAULICS - 9M. C. SD.
  - CATHODE RAY OSCILLOSCOPE - 20M. B+W. SD.
  - CATHODE RAY TUBE. THE - 15M. B+W. SD.
  - ELECTROCHEMISTRY - 10M. B+W. SD.
  - ELEMENTARY HYDRAULICS--A SERIES
  - ELEMENTS. THE -- A SERIES
  - ENERGY AND ITS TRANSFORMATIONS - 10M. B+W. SD.
  - FLUID FLOW IN HYDRAULIC SYSTEMS - 28M. C. SD.
  - FUNDAMENTALS OF ACOUSTICS - 11M. B/W. SD.
  - G AND YOU - 50M. C. SD.

ABC OF G, THE - 19M, C, SD. SERV CHG $5.00

PRESENTS THE PROBLEM OF HIGH ACCELERATION AND ITS PHYSICAL EFFECTS ON PILOTS. STUDIES THE EFFECT OF G ON THE PILOT IN DIFFERENT FLIGHTS. DEMONSTRATES THE ACCELEROMETER AND THE CENTRIFUGE. GIVES SOME SUGGESTIONS FOR ADVANCING THE BLACKOUT THRESHOLD.

ACROBATIC CHECKS - 19M, B+W, SD. SERV CHG $4.00

FROM THE SERIES, INTERMEDIATE ACROBATICS. JOE STUDENT DEMONSTRATES THE PROCEDURE FOR ACROBATIC CHECKS MAKING A FLIPPER TURN, LOOP, RIGHT SLOW ROLL, RIGHT CHANDELLE, AND RIGHT AND LEFT PRECISION SPIN. STRESSES THE IMPORTANCE OF THE CHECK AND STAYING WITHIN THE CHECK RANGE.

ACROBATICS - 19M, B+W, SD. SERV CHG $4.00

SHOWS A BRIEF SCENE OF A DUEL BETWEEN TWO FIGHTER PLANES. THROUGH THE USE OF ANIMATION, SHOWS HOW THE CONTROLS OF A PLANE OPERATE AND THEIR EFFECT ON THE ATTITUDE OF THE PLANE. DEMONSTRATES THE USE OF CONTROLS ON A SLOW ROLL, LOOP, SNAP ROLL, HALF ROLL AND REVERSE, VERTICAL REVERSE AND IMMELMAN TURN. ALSO SEE INTERMEDIATE ACROBATICS.

ADJUSTMENT OF THE HARNESS - 12M, B+W, SD. SERV CHG $4.00

FROM THE SERIES, PARACHUTES. SHOWS HOW THE PARACHUTE HARNESS IS FITTED TO THE INDIVIDUAL AND THEN SEWED SO THAT IT WILL STAY IN ADJUSTMENT.

ADJUSTMENTS AFTER FLIGHT CHECK - 19M, B+W, SD. SERV CHG $4.00

SHOWS SOME CAUSES OF NOSE-HEAVINESS, TAIL-HEAVINESS, YAWING, TORQUE TENDENCY, ROUGH PROPELLER, AND GROUND LOOPING, HOW TO DETERMINE THE PARTICULAR CAUSE OF THESE TROUBLES, AND HOW TO MAKE THE NECESSARY ADJUSTMENTS.

AERIAL MAP READING - 22M, B+W, SD. SERV CHG $5.00

FROM THE SERIES, NAVIGATION. HOW TO READ AERIAL MAPS AND THE USE OF LANDMARKS AND FEATURES IN FINDING POSITION ARE STUDIED. BRIEFLY TOUCHES ON CHANGING SEASONS, FEATURES TO LOOK FOR AT SEA, NIGHT FLYING, AND FLYING WHEN LOST. PLOTS A COURSE FROM CORPUS CHRISTI TO SABINE PASS, DETERMINES ETA USING LANDMARKS IN THE DEMONSTRATION.

AERODYNAMICS--A SERIES--SEE FOLLOWING TITLES

AIR FLOW...FORCES ACTING ON AN AIR FOIL.

AEROLOGY--A SERIES--SEE FOLLOWING TITLES

AIR MASSES AND FRONTS...THE COLD FRONT...FLYING THE WEATHER MAP... FOG...ICE FORMATION ON AIRCRAFT...THE OCCLUDED FRONTS...THUNDERSTORMS...THE WARM FRONT.

AIR DEFENSE - 27M, B+W, SD. SERV CHG $5.00

SHOWS THE VITAL ROLE PLAYED BY VOLUNTEERS OF THE GROUND OBSERVER CORPS WHO WORK TOGETHER WITH THE U. S. AIR FORCE AIR DEFENSE COMMAND TO DEFEND OUR NATION AGAINST SUDDEN DESTRUCTION FROM THE AIR.

AIR FLOW - 18M, B+W, SD. SERV CHG $4.00

FROM THE SERIES, AERODYNAMICS. EXPLAINS TURBULENCE AND SKIN FRICTION THROUGH THE FLOW OF SMOKE OVER VARIOUS SOLID SHAPES AND FORMS. ALSO EXPLAINS AND DEFINES THE ANGLE OF ATTACK, POINT OF STALL, DRAG, AND LIFT THROUGH THE USE OF SMOKE STREAMS.

AIR IN ACTION - 10M, B+W, SD. SERV CHG $4.00

DEMONSTRATES THE SCIENCE OF AERODYNAMICS BY EXPLAINING SIMPLE PARLOR TRICKS IN TERMS OF SCIENTIFIC KNOWLEDGE AND APPLICATION OF THAT KNOWLEDGE TO EVERYDAY LIVING. AIR RESISTANCE IS ANALYZED, AND APPLICATIONS TO COMMON EXPERIENCES ARE EXPLAINED. AN INTERESTING SEQUENCE, FILMED IN THE GIANT WIND TUNNEL OF THE ARMY AIR FORCES AT WRIGHT FIELD, SHOWS AIR CURRENTS AROUND A MODEL, THE BREAKING UP OF STREAM LINES BEHIND THE MODEL, AND THE DEVELOPMENT OF THE MOST EFFICIENT AERODYNAMIC SHAPE.

AIR MASSES AND FRONTS - 26M, C, SD. SERV CHG $6.00

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DEMONSTRATES THE PROCEDURES FOR THE 50-HOUR INSPECTION OF THE AIRPLANE INSTRUMENTS IN A B-17. THE PROCEDURES DEMONSTRATED ARE APPLICABLE TO MANY OTHER TYPES OF AIRCRAFT.

AIRCRAFT WELDING - 18M, B+W, SD. SERV CHG $4.00

DEMONSTRATES THE PROPER METHOD OF SETTING UP WELDING APPARATUS, LIGHTING THE TORCH, DIFFERENT TYPES OF FLAMES, AND THE EFFECT OF EACH ON STEEL. THE CORRECT METHOD OF MAKING RIPPLES AND BEADS IS SHOWN AS WELL AS HOW TO TURN OFF, TO CARE FOR, AND TO PUT AWAY THE WELDING APPARATUS.

AIRPLANE - 17M, B+W, SD. SERV CHG $4.00

FROM THE SERIES, PREFLIGHT INSPECTION. SHOWS THE NECESSITY FOR CAREFUL AND THOROUGH INSPECTION, HOW TO USE THE CIRCLE METHOD TO GIVE A COMPLETE AND SYSTEMATIC INSPECTION AND HOW EACH PART--LANDING GEAR, WINGS, FUSELAGE, TAIL SURFACES, CABIN, CONTROLS, INSTRUMENTS--IS INSPECTED.

AIRPLANE CHANGES OUR WORLD MAP - 11M, B+W, SD. SERV CHG $4.00

TRACES THE EVOLUTION OF WORLD MAP CONCEPTS FROM ANCIENT TIMES TO THE AIR AGE. CONSIDERS EARLY PROBLEMS OF MAP PROJECTION DISTORTION, AND REVIEWS PROJECTIONS OF MERCATOR, MOLLWEIDE, AND GOODE. EMPHASIZES, WITH IMPRESSIVE ANIMATION, THE CONCEPTS OF MODERN MAP MAKING AS INFLUENCED BY THE GREAT SHRINKAGE IN TIME-DISTANCE VALUES, THE SPEED OF AIRCRAFT, AND THEIR STRAIGHT LINE OF TRAVEL.

AIRPLANE HYDRAULIC BRAKES--BRAKE - 17M, B+W, SD. SERV CHG $4.00

AIRPLANE HYDRAULIC BRAKES--BRAKE ADJUSTMENT--HAYES AND GOODYEAR BRAKES - SHOWS THE PROPER STEPS TO ADJUST AND TEST THE HAYES AND GOODYEAR BRAKES.

AIRPLANE HYDRAULIC SYSTEMS--BC-1 - 13M, B+W, SD. SERV CHG $4.00

AIRPLANE HYDRAULIC SYSTEMS--BC-1 AIRPLANE - ILLUSTRATES HYDRAULIC SYSTEMS AS APPLIED TO THE RETRACTABLE LANDING GEAR, TO THE BRAKES, TO THE VARIABLE PITCH PROPELLER. THE PUMPS, RESERVOIRS, SPECIAL VALVES, AND THE OPERATING LEVERS ARE ALSO DIAGRAMMED AND EXPLAINED. SPECIFIC APPLICATION OF THESE PRINCIPLES TO THE BC-1 PLANE IS SHOWN.

AIRPLANE MECHANIC - 9M, B+W, SD. SERV CHG $3.00

PLANNED AS AN ORIENTATION FILM FOR BEGINNING AIRPLANE MECHANICS. SHOWS AND EXPLAINS THE SKILLS AND KNOWLEDGE REQUIRED TO MAKE SATISFACTORY INSPECTIONS AND REPAIRS. EMPHASIZES THE IMPORTANCE OF THOROUGHNESS, SKILL AND DEPENDABILITY.

AIRPLANE PROPELLERS--A SERIES--SEE FOLLOWING TITLES

DISASSEMBLING HUB AND BLADES OF CURTISS ELECTRIC PROPELLERS...PRINCIPLES AND TYPES OF PROPELLERS...PROPELLER INSTALLATION OF THE HAMILTON HYDROMATIC...REASSEMBLY AND ADJUSTING PARTS OF THE HAMILTON HYDROMATIC PROPELLER...REASSEMBLY OF HUB AND BLADES OF CURTISS ELECTRIC PROPELLERS...REMOVAL AND DISASSEMBLY OF CURTISS ELECTRIC PROPELLERS...SERVICING HAMILTON HYDROMATIC PROPELLERS.

AIRPLANE STRUCTURES--A SERIES--SEE FOLLOWING TITLES

ALIGHTING GEAR...MANUFACTURING METHODS...WING CONSTRUCTION

AIRPLANES AND HOW THEY FLY -10M, B+W, SD. SERV CHG $4.00

OFFERS AN ELEMENTARY EXPLANATION OF LIFT AND A BRIEF DISCUSSION OF THE BASIC CONTROLS-RUDDER, ELEVATORS, AILERONS-USED TO MANEUVER A PLANE IN FLIGHT. ALSO PRESENTS EXAMPLES OF THE RANGE IN TYPES AND SIZES OF PLANES.

SUBJECT MATTER LISTING -- U.S.C. FILM CATALOG 1963

A

- ACROBATICS, SUBJECT OF--SEE THE FOLLOWING
  - ACROBATICS - 19M, B+W, SD.
  - AIRPLANES AND HOW THEY FLY -10M, B+W, SD.
  - CHANDELLE - 7M, B+W, SD.
  - CHANDELLES - 15M, B+W, SD.
  - FLIGHT PATH PRECISION - 21M, B+W, SD.
  - IMMELMAN - 11M, B+W, SD.
  - INTERMEDIATE ACROBATICS--A SERIES--SEE FOLLOWING
  - INVERTED SPINS - 10M, B+W, SD.
  - LOOPS - 14M, B+W, SD.
  - PRECISION SPIN - 12M, B+W, SD.
  - SLOW ROLL - 11M, B+W SD.

- AERODYNAMICS, SUBJECT OF--SEE THE FOLLOWING
  - ABC OF G, THE - 19M, C, SD.
  - AERODYNAMICS--A SERIES--SEE FOLLOWING TITLES
  - AIR FLOW - 18M, B+W, SD.
  - AIR IN ACTION - 10M, B+W, SD.
  - AIRPLANES AND HOW THEY FLY -10M, B+W, SD.
  - FORCES ACTING ON AN AIR FOIL - 27M, B+W, SD.
  - G AND YOU - 50M, C, SD.
  - OCCLUDED FRONTS, THE - 22M, C, SD.
  - WARM FRONT, THE - 21M, C, SD.

- AERONAUTICS, SUBJECT OF--SEE THE FOLLOWING
  - AIRBORNE MAGNETOMETER, THE - 24M, B+W, SD.
  - CELESTIAL NAVIGATION--A SERIES--SEE FOLLOWING TITLES
  - FLYING THE WEATHER MAP--A SERIES--SEE FOLLOWING TITLES
  - GYROSCOPE AND EARTH ROTATION - 10M, B+W, SD.
  - GYROSCOPE AND GRAVITATION - 15M, B+W, SD.
  - INSTRUMENT FLIGHT CONTROL--A SERIES--SEE FOLLOWING
  - MODERN WEATHER--A SERIES--SEE FOLLOWING TITLES
  - NAVIGATION -- A SERIES -- SEE FOLLOWING TITLES
  - NIGHT VISION FOR AIRMEN - 19M, B+W, SD.
  - RADIO RANGE ORIENTATION - 20M, B+W, SD.
  - WEATHER FOR NAVIGATION - 9M, B+W, SD.

- AIRPLANES--GENERAL, SUBJECT OF--SEE THE FOLLOWING
  - AIR TRANSPORTATION - 11M, B+W, SD.
  - AIRPLANE CHANGES OUR WORLD MAP - 11M, B+W, SD.
  - AIRPLANES AND HOW THEY FLY -10M, B+W, SD.
  - AIRPORT, THE - 11M, B+W, SD.
  - AMERICAS NEW AIR POWER - 18M, B+W, SD.
  - BUILDING A BOMBER - 20M, B+W, SD.
  - FOOD FOR FLYING - 10M, B+W, SD.
  - FRED AND BILLY TAKE AN AIRPLANE TRIP - 11M, C, SD.
  - HOW TO FLY THE B-26 AIRPLANE-LOADING - 25M, B+W, SD.
  - HOW TO FLY THE B-26 AIRPLANE - 45M, B+W, SD.
  - JET PROPULSION - 12M, C, SD.
  - USE OF AIRCRAFT FOR INSECT CONTROL - 14M, B+W, SD.
  - WONDER JET - 20M, B+W, SD.
  - WORKING WITH WINGS - 11M, B+W, SD.

- AIRPLANES--MAINTENANCE, SUBJECT OF--SEE THE FOLLOWING
  - ADJUSTMENTS AFTER FLIGHT CHECK - 19M, B+W, SD.
  - AIRCRAFT ALIGHTING GEAR--A SERIES--SEE FOLLOWING
  - AIRCRAFT ENGINES--ELEMENTS OF - 28M, B+W, SD.
  - AIRCRAFT FIFTY-HOUR INSPECTION - 22M, B+W, SD.
  - AIRCRAFT WELDING - 18M, B+W, SD.
  - AIRPLANE HYDRAULIC BRAKES--BRAKE - 17M, B+W, SD.
  - AIRPLANE HYDRAULIC SYSTEMS--BC-1 - 13M, B+W, SD.
  - AIRPLANE MECHANIC - 9M, B+W, SD.
  - AIRPLANE PROPELLERS--A SERIES--SEE FOLLOWING TITLES
  - AIRPLANE STRUCTURES--A SERIES--SEE FOLLOWING TITLES
  - ALIGHTING GEAR - 10M, B+W, SD.
  - ALLISON ENGINE--INTRODUCTION AND - 8M, B+W, SD.
  - ASSEMBLY OF MAIN ALIGHTING GEAR - 20M, B+W, SD.
  - CLEANING UP - 20M, B+W, SD.
  - CONSTRUCTION AND TYPES - 10M, B+W, SD.
  - DAMAGE CONTROL--A SERIES--SEE FOLLOWING TITLES
  - DISASSEMBLING HUB AND BLADES OF - 13M, B+W, SD.
  - DOPING TECHNIQUE - 10M, B+W, SD.
  - ELEMENTARY HYDRAULICS--A SERIES--SEE FOLLOWING TITLES
  - ENGINE - 13M, B+W, SD.
  - ENGINE CHANGE--A SERIES--SEE FOLLOWING TITLES
  - EYES OF FLIGHT - 31M, C, SD.
  - FLY HIGH + LIVE--OXYGEN EQUIPMENT - 28M, B+W, SD.
  - FORMING METHODS - METALS - 40M, B+W, SD.
  - INSPECTION OF MINOR ASSEMBLIES - 16M, B+W, SD.
  - MAINTENANCE OF ALIGHTING GEAR - 12M, B+W, SD.
  - MECHANICAL + LUBRICATICN - 10M, B+W, SD.
  - OPERATION OF THE LANDING GEAR OF AT-9 - 7M, B+W, SD.
  - OXYGEN EQUIPMENT--A SERIES--SEE FOLLOWING TITLES
  - PARACHUTES--A SERIES--SEE FOLLOWING TITLES
  - PERIODIC INSPECTION--AIRPLANE - 17M, B+W, SD.
  - PERIODIC INSPECTION--ENGINE - 23M, B+W, SD.
  - PREPARATION OF AIRCRAFT ENGINES FOR STORAGE--A SERIES-
  - PRESERVATION - 25M, B+W, SD.
  - PRINCIPLES OF LUBRICATION - 17M, B+W, SD.
  - PROPELLER INSTALLATION OF THE -13M, B+W, SD.
  - REASSEMBLY AND ADJUSTING PARTS OF - 44M, B+W, SD.
  - REASSEMBLY OF HUB AND BLADES OF - 15M, B+W, SD.
  - REMOVAL - 17M, B+W, SD.
  - REMOVAL AND DISASSEMBLY OF CURTISS - 10M, B+W, SD.
  - REMOVAL OF NOSE ALIGHTING GEAR - 6M, B+W, SD.
  - RETREAT AND PREPARATION FOR SERVICE - 13M, B+W, SD.
  - SERVICING AN AIRPLANE - 17M, B+W, SD.
  - SERVICING HAMILTON HYDRO PROPS - 8M, B+W, SD.
  - SERVICING THE AVIATION SPARK PLUG - 23M, B+W, SD.
  - SERVICING THE HIGH PRESSURE REMOVABLE - 10M, B+W, SD.
  - SYNCHRONIZATION OF AIRCRAFT-PRINCIPLES - 8M, B+W, SD.
  - TROUBLE SHOOTING PROBLEMS--A SERIES--SEE FOLLOWING
  - WING CONSTRUCTION - 10M, B+W, SD.
  - WORKING WITH WINGS - 11M, B+W, SD.
  - WRIGHT ENGINE--1820--A SERIES--SEE FOLLOWING TITLES

- AIRPLANES--SAFETY, SUBJECT OF--SEE THE FOLLOWING
  - CHEMISTRY OF FIRE, THE - 46M, B+W, SD.
  - CRASH FIRE RESCUE - 23M, B+W, SD.
  - CRASH SURVIVAL RESEARCH - 26M, C, SD.
  - DISORIENTATION CRASHES - 5M, B+W, SD.
  - DITCHING WITHOUT HEDGING - 22M, B+W, SD.
  - DOPING TECHNIQUE - 10M, B+W, SD.
  - EMERGENCY LANDING ON LAND - 6M, B+W, SD.
  - FLIGHT SAFETY--A SERIES--SEE FOLLOWING TITLES
  - FOREIGN MATERIAL INGESTION - 18M, C, SD.
  - LANDING ACCIDENTS - 6M, B+W, SD.
  - NO MARGIN FOR ERROR - 25M, C, SD.
  - SAFE AIRMEN - 22M, B+W, SD.
  - SAFE FLIGHT OPERATIONS - 20M, B+W, SD.
  - SAFETY IN AIR STATIONS - 13M, B+W, SD.
  - SPINS AND STALLS - 18M, B+W, SD.

- AMERICAN HISTORY, SUBJECT OF--SEE FOLLOWING
  - AMERICAN WEST--A SERIES--SEE FOLLOWING
  - INDIAN COUNTRY - 28M, C, SD.
  - SOUTHWEST HERITAGE - 6M, B+W, SD.

- ANIMALS, SUBJECT OF--SEE FOLLOWING
  - SQUEAK THE SQUIRREL - 10M, B+W, SD.

- AVIATION, SUBJECT OF--SEE THE FOLLOWING
  - AIRBORNE OPERATIONS - 22M, B+W, SD.
  - AIRPLANE - 17M, B+W, SD.
  - CEILING UNLIMITED - 30M, B+W, SD.
  - CRASH FIRE RESCUE - 23M, B+W, SD.
  - CRASH SURVIVAL RESEARCH - 26M, C, SD.
  - FLIGHT PATH PRECISION - 21M, B+W, SD.
  - FORCES ACTING ON AN AIR FOIL - 27M, B+W, SD.
  - GATEWAY - 18M, B+W, SD.
  - INERTIAL NAVIGATION - 18M, C, SD.
  - INSPECTION AND MAINTENANCE - 25M, B+W, SD.
  - JET PROPULSION - 12M, C, SD.
  - OUR TOWN BUILDS AN AIRPORT - 36M, C, SD.
  - SAFE AIRMEN - 22M, B+W, SD.
  - SAFE FLIGHT OPERATIONS - 20M, B+W, SD.
  - SAFETY IN AIR STATIONS - 13M, B+W, SD.
  - STRATEGIC AIR POWER - 25M, B+W, SD.
  - TARGET FOR TONIGHT - 48M, B+W, SD.
  - THAT MEN MAY FLY - 23M, B+W, SD.
  - WINGS TO THE WORLD - 27M, B+W, SD.

C

- CIVIL DEFENSE, SUBJECT OF--SEE FOLLOWING
  - AIR DEFENSE - 27M, B+W, SD.
  - AIR POWER IS PEACE POWER - 27M, B+W, SD.
  - AMERICAS NEW AIR POWER - 18M, B+W, SD.
  - STRATEGIC AIR POWER - 25M, B+W, SD.

E

- ELECTRONICS, SUBJECT OF--SEE FOLLOWING
  - CAPACITANCE - 31M, B+W, SD.
  - CATHODE RAY OSCILLCSCOPE - 20M, B+W, SD.
  - CATHODE RAY TUBE, THE - 15M, B+W, SD.
  - ELEMENTARY ELECTRICITY--AMPERES, VOLTS - 8M, B+W, SD.
  - ELEMENTARY ELECTRICITY--CURRENT AND - 10M, B+W, SD.
  - FUNDAMENTALS OF THE ANTENNA - 13M, B+W, SD.
  - INTRODUCTION TO RADAR - 26M, B+W, SD.
  - OSCILLATORS - 13M, B+W, SD.
  - RADIO OPERATOR TRAINING--A SERIES--
  - RHYTHM, SPEED AND ACCURACY IN HAND - 12M, B+W, SD.
  - SOUND RECORDING AND REPRODUCTION - 11M, B+W, SD.

- ENGINES, SUBJECT OF--SEE THE FOLLOWING
  - AIRCRAFT ENGINES--ELEMENTS OF - 28M, B+W, SD.
  - ALLISON ENGINE--INTRODUCTION AND - 8M, B+W, SD.
  - ENGINE - 13M, B+W, SD.
  - FOREIGN MATERIAL INGESTION - 18M, C, SD.
  - FUEL INDUCTIONS - 16M, B+W, SD.
  - IGNITION - 19M, B+W, SD.
  - JET PROPULSION - 12M, C, SD.
  - MECHANICAL + LUBRICATICN - 10M, B+W, SD.
  - PREFLIGHT INSPECTION--A SERIES--SEE FOLLOWING TITLES
  - REMOVAL - 17M, B+W, SD.
  - RETREAT AND PREPARATION FOR SERVICE - 13M, B+W, SD.
  - TROUBLE SHOOTING PROBLEMS--A SERIES--SEE FOLLOWING
  - WRIGHT ENGINE--1820--A SERIES--SEE FOLLOWING TITLES

F

- FIRE, SUBJECT OF--SEE FOLLOWING
  - CHEMISTRY OF FIRE, THE - 46M, B+W, SD.
  - CRASH FIRE RESCUE - 23M, B+W, SD.
  - SCHOOL OF THE FIRE FIGHTER - 40M, B+W, SD.

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Municipal Airport
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Audio-Visual Department
894 Rialto Avenue
San Bernardino, California 92410

Office of Riverside County
Superintendent of Schools
4015 Lemon Street
Riverside, California 92502

Orange Unified Schools
Audio-Visual Department
370 North Glassell
Orange, California 92667

Los Angeles County Public Library
320 West Temple Street
P. O. Box 111
Los Angeles, California

San Fernando Valley State College
18111 Nordhoff Street
Northridge, California

Alhambra City Schools
Instructional Materials Department
601 North Garfield Avenue
Alhambra, California

Special Media Institute
Department of Instructional
Technology
School of Education
University of Southern California

Riverside Unified School District
Administration Building
3954 12th Street
Riverside, California

County of Los Angeles
Superintendent of Schools
155 West Washington Boulevard
Los Angeles, California 90015

Beverly Hills Unified School
District
841 Marino Drive
Beverly Hills, California

La Mesa-Spring Valley School
District
4750 Date Street
La Mesa, California

West Covina Unified School
District
1717 West Merced Avenue
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904 North Willow Avenue
Bassett, California 91746

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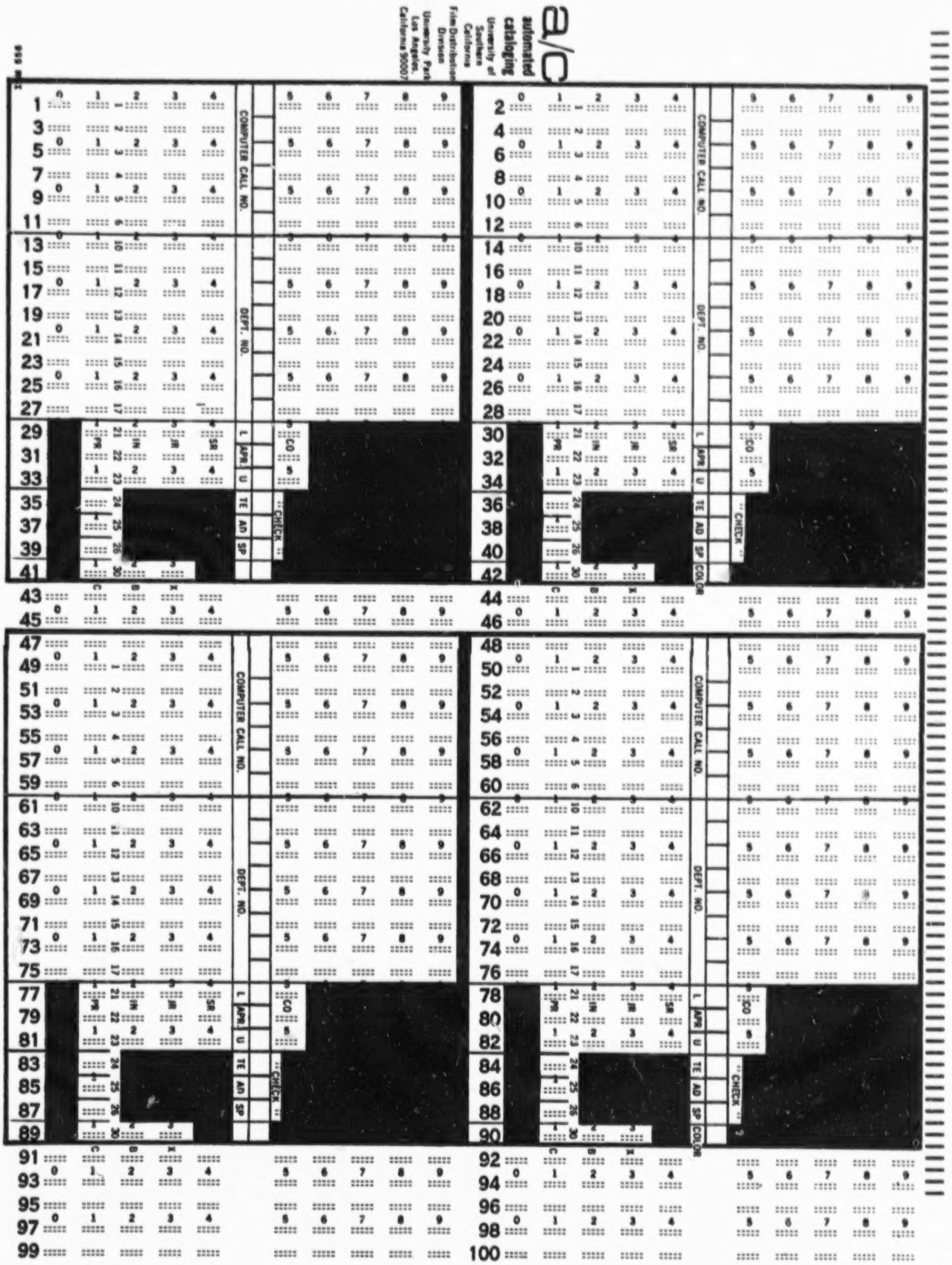

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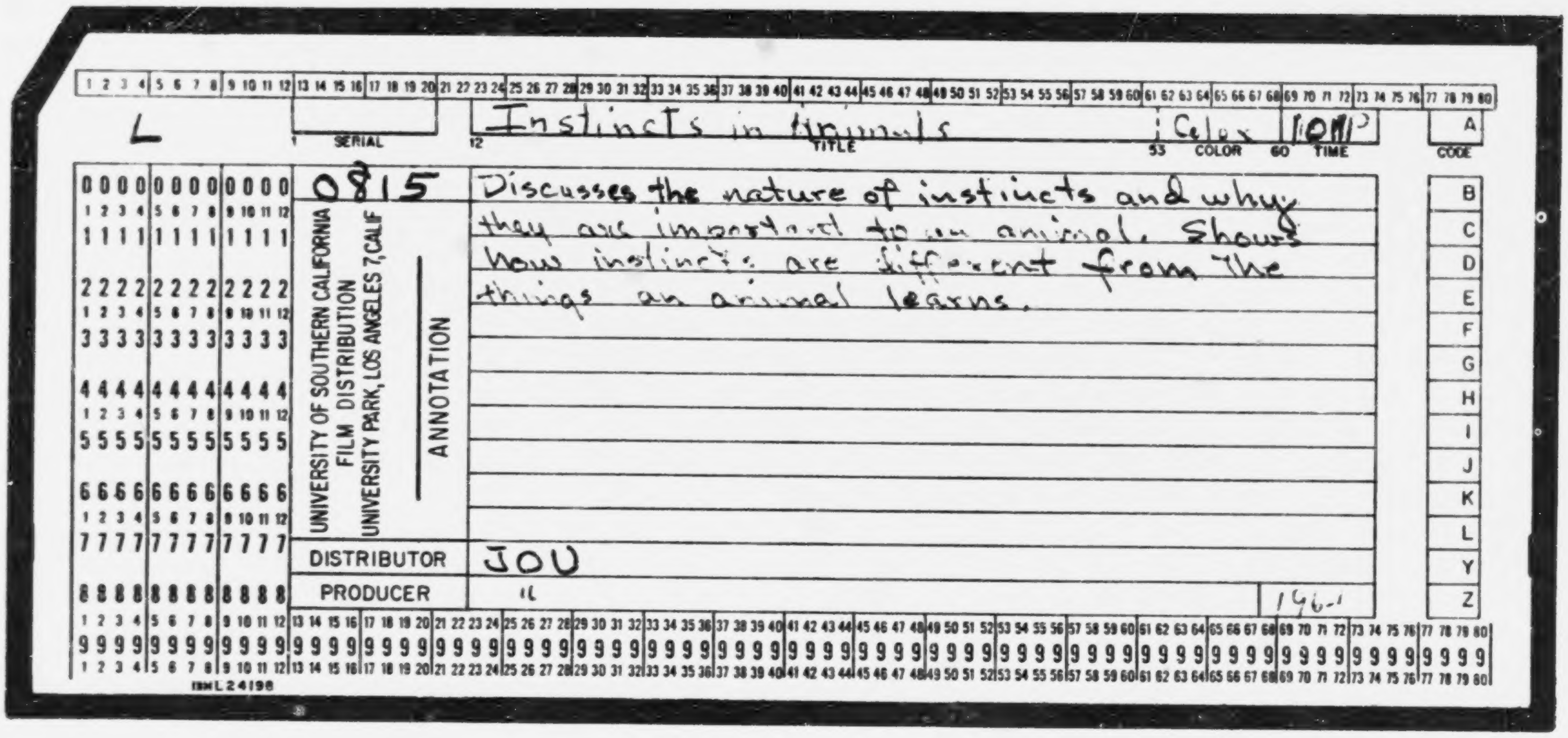


L

SERIAL: 0815

TITLE: Instincts in Animals

COLOR: Color

TIME: 10MP

CODE: A

UNIVERSITY OF SOUTHERN CALIFORNIA
FILM DISTRIBUTION
UNIVERSITY PARK, LOS ANGELES 7, CALIF

ANNOTATION: Discusses the nature of instincts and why they are important to an animal. Shows how instincts are different from the things an animal learns.

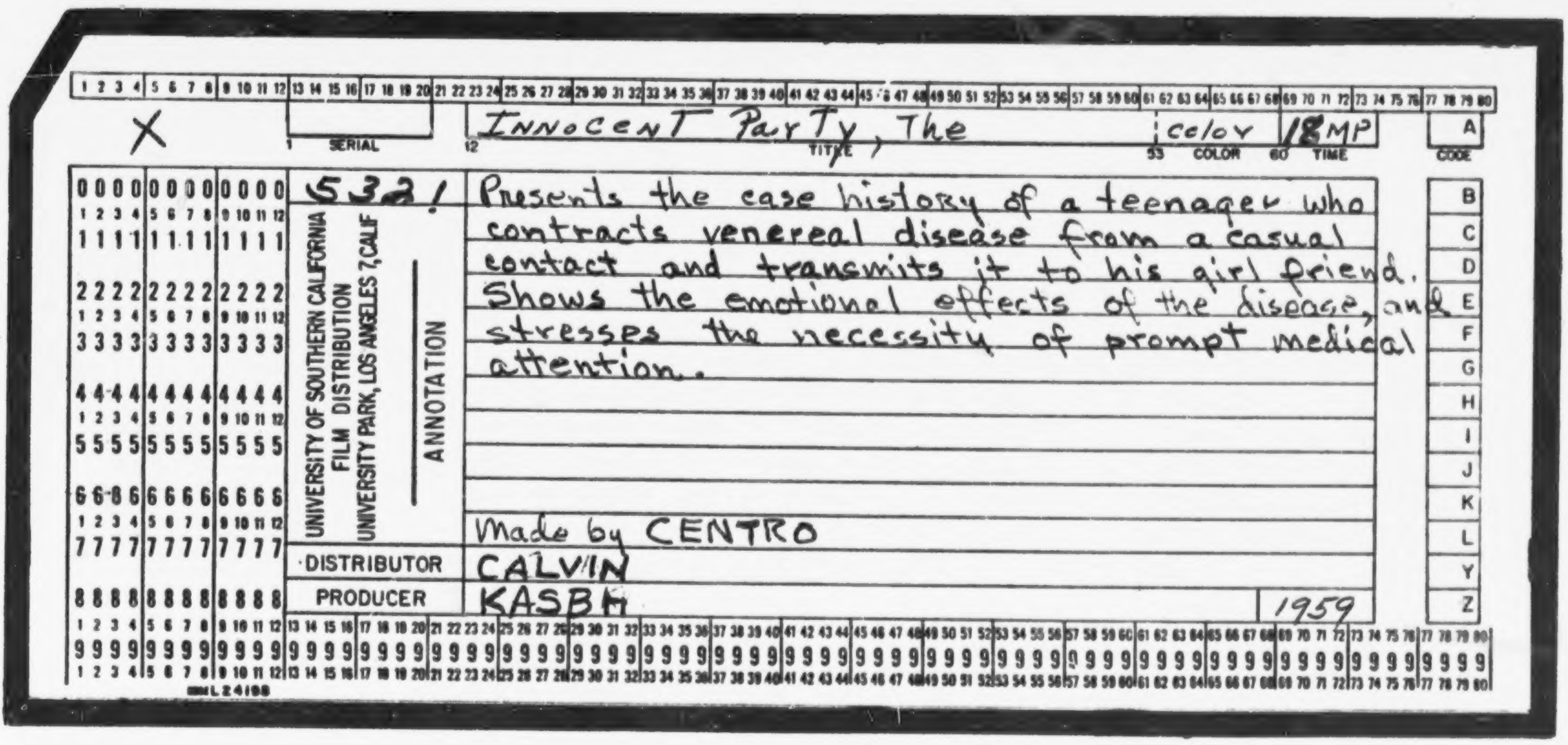
DISTRIBUTOR: JOU

PRODUCER: 〃

1961

B C D E F G H I J K L Y Z

IBM L24198



X

SERIAL: 5321

TITLE: INNOCENT PARTY, The

COLOR: color

TIME: 18MP

CODE: A

UNIVERSITY OF SOUTHERN CALIFORNIA
FILM DISTRIBUTION
UNIVERSITY PARK, LOS ANGELES 7, CALIF

ANNOTATION: Presents the case history of a teenager who contracts venereal disease from a casual contact and transmits it to his girl friend. Shows the emotional effects of the disease, and stresses the necessity of prompt medical attention.

Made by CENTRO

DISTRIBUTOR: CALVIN

PRODUCER: KASBH

1959

B C D E F G H I J K L Y Z

IBM L24198

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                             MASTER TITLE LISTING

001532        40  BIRD MIGRATION                                 010MP6PC   HNP

001533            BIRD'S NESTS                                   012MP6PC   CENCO

001537            BIRDS - HOW WE IDENTIFY THEM                   011MP6PC   CORF

001540            BIRDS AND ETCHING                              005MP6PC   BAF     BACH
                     FROM THE CHILD ART AND NATURE SERIES.

001541            BIRDS AND MAMMALS                              028MP6PB   MGHT    AIBS
                     FROM THE AIBS MODERN BIOLOGY FILM SERIES.
                     PT 8, DIVERSITY OF ANIMALS

001542        65  BIRDS AND NESTS                                010MP6PC   GATEP   WASH
                     FROM THE PRIMARY NATURE SERIES.

001543            BIRDS AND THEIR CHARACTERISTICS                011MP6PC   CORF

001545            BIRDS ARE INTERESTING                          011MP6PC   EBF

001549        55  BIRDS IN WINTER                                011MP6PX   CORF

001550            BIRDS IN WINTER                                011MP6PC   EBF

001551            BIRDS IN YOUR BACKYARD                         011MP6PC   BARR

001553        49  BIRDS OF NORTH AMERICA, NO. 5                  010MP6PC   NFBC

      NOTE:  Shows temporary serial number, year released, title and series
             title, bio-data (length, media, size, track and stock), dis-
             tributor and producer codes.
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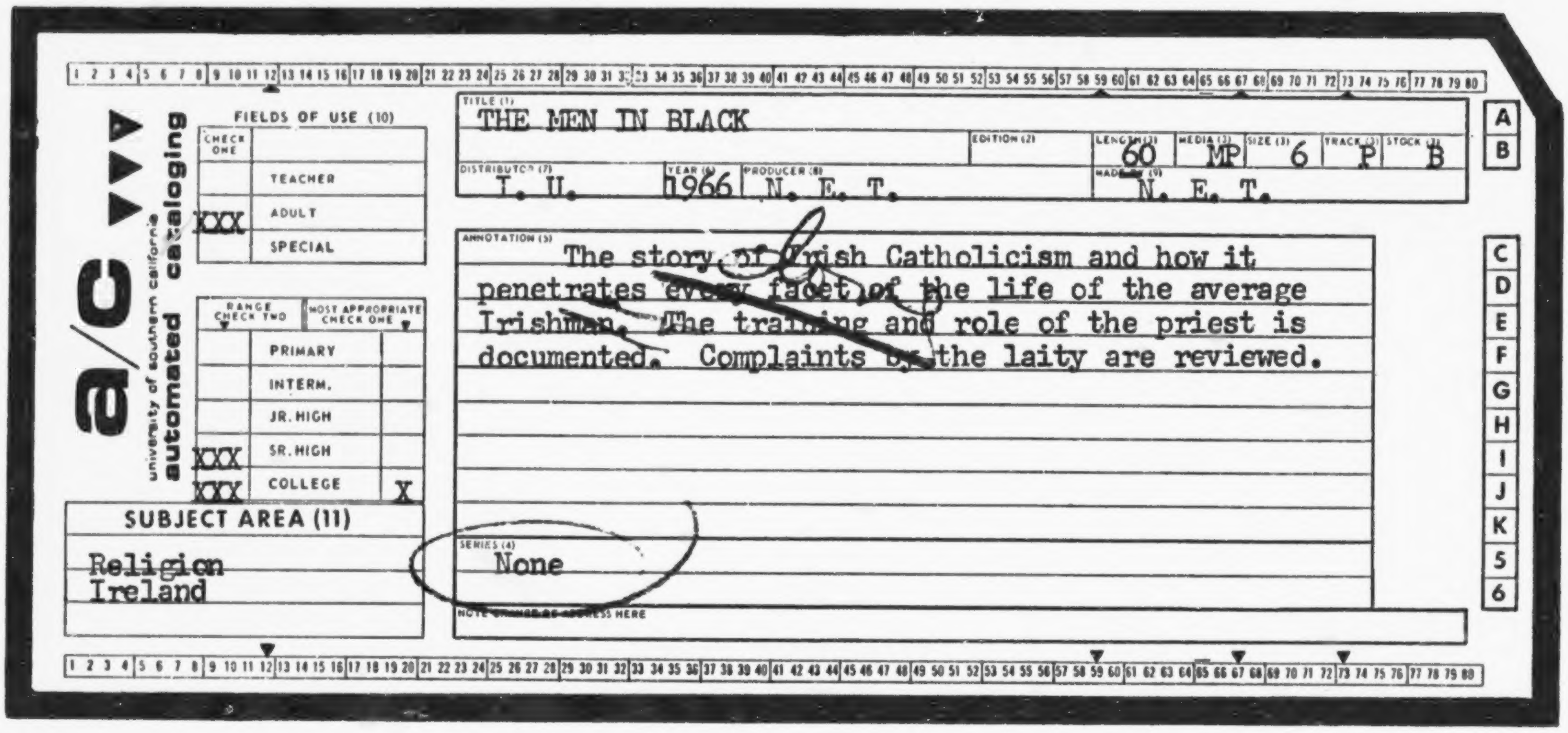
MASTER TITLE LISTING

MASTER FILE LISTING, MARKED COPY

MASTER FILE LISTING AS OF BATCH NO. 85 INCLUDES SERIES TITLES ONLY N

	PRODN	YR	TITLES	BIO—DATA	PRODR	DISTR	MEDIA PRINT	ORN	LBN
0125		65 45T	A IS FOR AERONAUTICS FROM THE SPACE - MAN'S GREAT ADVENTURE SERIES.	027MP6P Ⓑ	NASA	NASA		085	
			A IS FOR ARCHITECTURE	030MP6P C	NFBC	IFB		059	
	SUEF	64	A IS FOR ATOM (2ND ED)	015MP6P C	GE	GE		030	81
			A PLUS B SQUARED	010MP6P B	IFB	IFB		040	
			A TRAVERS PARIS FROM THE VOIX ET IMAGES DE FRANCE SERIES.	012MP6P C	CHLTN	CHLTN		034	
0246		64 5C	A TRAVERS PARIS FROM THE ICI LA FRANCE SERIES. EVERYDAY ASPECTS OF FRENCH CULTURAL LIFE	020MP6P ~~B~~ C	ATV	MGHT		013	
		47	A' PARIS	018MP6P B	BRER	IFB		012	
		58	ABACUS	011MP6P B	AVIS	AVIS		009	
0325		65 3[illegible]5	ABACUS (REV ED)	012MP6P Ⓒ	AVIS	AVIS		061	
			ABC OF AUTOMOBILE ENGINES	021MP6P C	GE	GE		034	
			ABC OF BABYSITTING, THE	010MP6P X	DAVP	DAVP		085	
		48	ABC OF G, THE	023MP6P C	USN	DUART		071	
	DISNEY	46	ABC OF HAND TOOLS, THE, PT 1	018MP6P C	GM	GM		009	
	DISNEY	46	ABC OF HAND TOOLS, THE, PT 2	015MP6P C	GM	GM		630	
	LAMBH	48	ABC OF INTERNAL COMBUSTION	013MP6P C	GM	GM		032	
	SOM		ABC OF JET PROPULSION	018MP6P C	GM	GM		032	
0421		45 24	ABC OF POTTERY MAKING	010MP6P ~~B~~ C	BAILEY	BAILEY		070	
0526		54 2③5T	ABC OF PUPPET MAKING - TYPE ONE PUPPETS - — THOSE EASIEST TO MAKE	010MP6P ~~X~~ C	BAILEY	BAILEY		017	81
0527		54 2⑤5T	ABC OF PUPPET MAKING - TYPE TWO PUPPETS - — THOSE WITH BUILT-UP FEATURES	010MP6P ~~X~~ C	BAILEY	BAILEY		019	81
	SOM	50	ABC OF THE DIESEL ENGINE	020MP6P C	GM	GM		059	
		50	ABC'S OF BEEF COOKERY	014MP6P C	ARMOUR	ARMOUR		076	
0683		65 14	ABOUT FLOWERS - LIFE STORY OF A PLANT FROM THE BASIC LIFE SCIENCE SERIES. WORLD OF PLANTS	007MP6P Ⓒ	NFBC	EBF		068	
			ABOUT THE HUMAN BODY FROM THE HEATH SCIENCE FILMS SERIES.	015MP6P C	CF	CF		030	
	WB		ABOUT TIME FROM THE BELL SYSTEM SCIENCE SERIES.	060MP6P C	NBCTV	BELL		032	
		60	ABOVE THE TIMBERLINE - THE ALPINE TUNDRA ZONE	016MP6P C	NFBC	MGHT		017	
		51	ABRAHAM LINCOLN	019MP6P B	EBF	EBF		009	
		51	ABRAHAM LINCOLN - A BACKGROUND STUDY	016MP6P C	CORF	CORF		030	80
			ABRAHAM LINCOLN - A STUDY IN GREATNESS, PT 1,— THE ILLINOIS YEARS	017MP6P C	LINE	LINE		012	73
			ABRAHAM LINCOLN - A STUDY IN GREATNESS, PT 2,— THE LINCOLN YEARS	017MP6P C	LINE	LINE		012	
			ABRAHAM LINCOLN - A STUDY IN GREATNESS, PT 3,— THE WAR YEARS	017MP6P C	LINE	LINE		012	
		57	ACCELERATED MOTION FROM THE INTRODUCTORY PHYSICS SERIES. MECHANICS, LESSON NO. 10	030MP6P X	EBF	EBF		067	
		57	ACCELERATED MOTION - LABORATORY FROM THE INTRODUCTORY PHYSICS SERIES. MECHANICS, LESSON NO. 11	030MP6P X	EBF	EBF		067	
	TAYLOR		-ACCENT AIGU—A SERIES	004MP6P B	FFC	IFB		060	
		49	ACCENT ON LEARNING	029MP6P B	OSUMPD	OSUMPD		047	73
		49	ACCENT ON LEARNING (SPANISH)	029MP6P B	OSUMPD	OSUMPD		080	
			ACCIDENT BEHAVIOR	020MP6P B	PGP	PGP		030	
		62	ACCIDENT SCENE	009MP6P C	IFB	IFB		059	
			-ACCIDENTS DON'T HAPPEN—A SERIES	000MP6P B	NFBC	NFBC		051	
		47	ACCORDING TO PLAN FROM THE ENGINEERING DRAWING SERIES.	009MP6P B	MGHT	MGHT		011	
		62	ACCOUNTING - BASIC PROCEDURES	011MP6P C	CORF	CORF		017	
			ACHIEVEMENT IN HONG KONG	015MP6P C	IFB	IFB		099	
			ACID-BASE INDICATORS FROM THE CHEM STUDY FILMS SERIES.	019MP6P C	MLA	MLA		017	
		59	ACID-BASE TITRATION, AN FROM THE CHEMISTRY - INTRODUCTORY COURSE SERIES. LESSON 50	030MP6P X	EBF	EBF		067	
			ACIDS FROM THE CHEMISTRY LABORATORY TECHNIQUES SERIES.	005MP6P X	DIS	AF		085	
		59	ACIDS AND BASES - AN INTRODUCTION FROM THE CHEMISTRY - INTRODUCTORY COURSE SERIES. LESSON 43	030MP6P C	EBF	EBF		067	

ORGANIZATION REPORT FORM FOR PRODUCERS



a/c university of southern california automated cataloging

FIELDS OF USE (10) CHECK ONE
TEACHER
ADULT: XXX
SPECIAL

RANGE CHECK TWO / MOST APPROPRIATE CHECK ONE
PRIMARY
INTERM.
JR. HIGH
SR. HIGH: XXX
COLLEGE: XXX / X

SUBJECT AREA (11)
Religion
Ireland

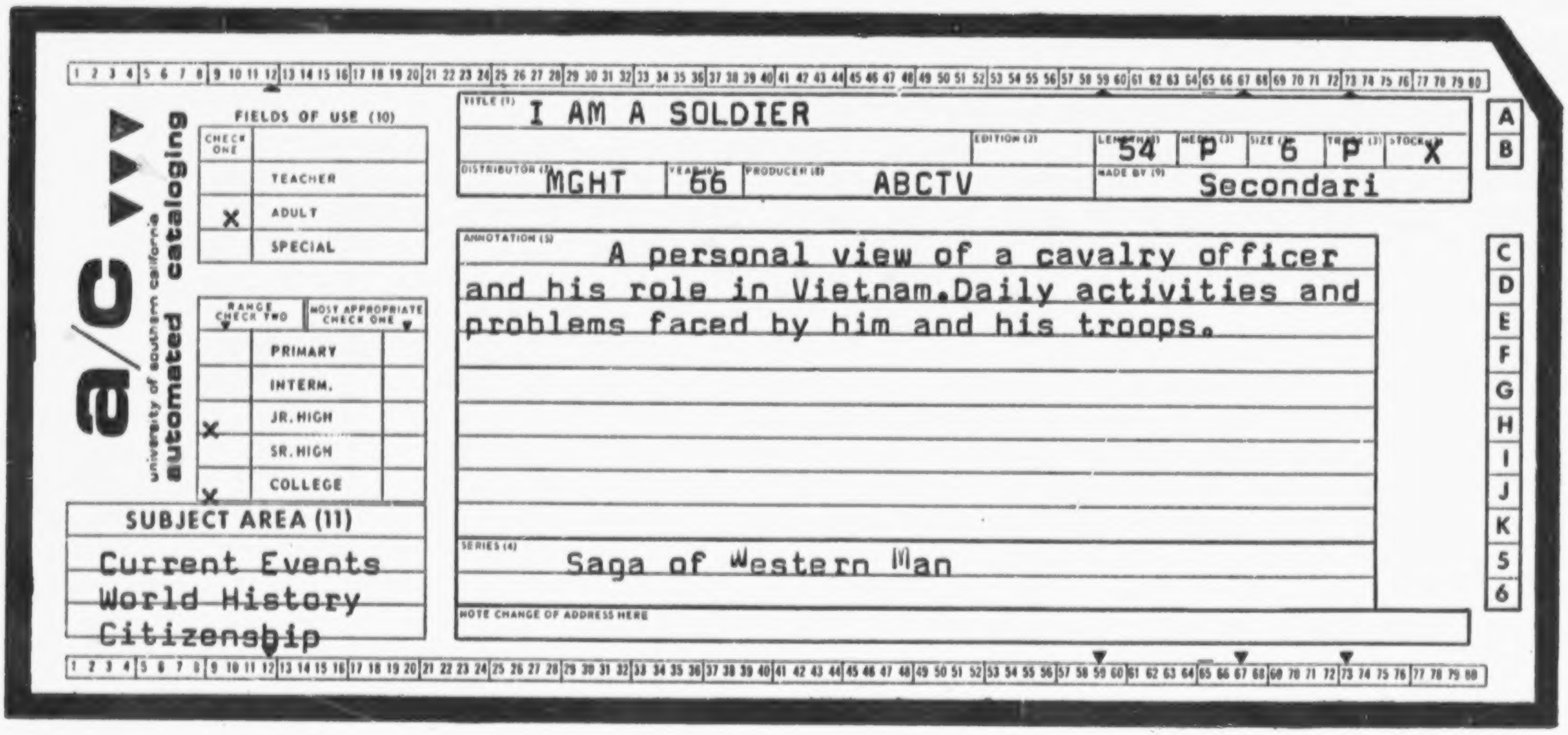
TITLE (1): THE MEN IN BLACK
EDITION (2):
LENGTH (3): 60
MEDIA (3): MP
SIZE (3): 6
TRACK (3): P
STOCK (3): B
DISTRIBUTOR (7): I. U.
YEAR (6): 1966
PRODUCER (8): N. E. T.
MADE BY (9): N. E. T.

ANNOTATION (5): The story of Irish Catholicism and how it penetrates every facet of the life of the average Irishman. The training and role of the priest is documented. Complaints by the laity are reviewed.

SERIES (4): None

NOTE CHANGE OF ADDRESS HERE

A B C D E F G H I J K 5 6



a/c university of southern california automated cataloging

FIELDS OF USE (10) CHECK ONE
TEACHER
ADULT: x
SPECIAL

RANGE CHECK TWO / MOST APPROPRIATE CHECK ONE
PRIMARY
INTERM.
JR. HIGH: x
SR. HIGH
COLLEGE: x

SUBJECT AREA (11)
Current Events
World History
Citizenship

TITLE (1): I AM A SOLDIER
EDITION (2):
LENGTH (3): 54
MEDIA (3): P
SIZE (3): 6
TRACK (3): P
STOCK (3): X
DISTRIBUTOR (7): MGHT
YEAR (6): 66
PRODUCER (8): ABCTV
MADE BY (9): Secondari

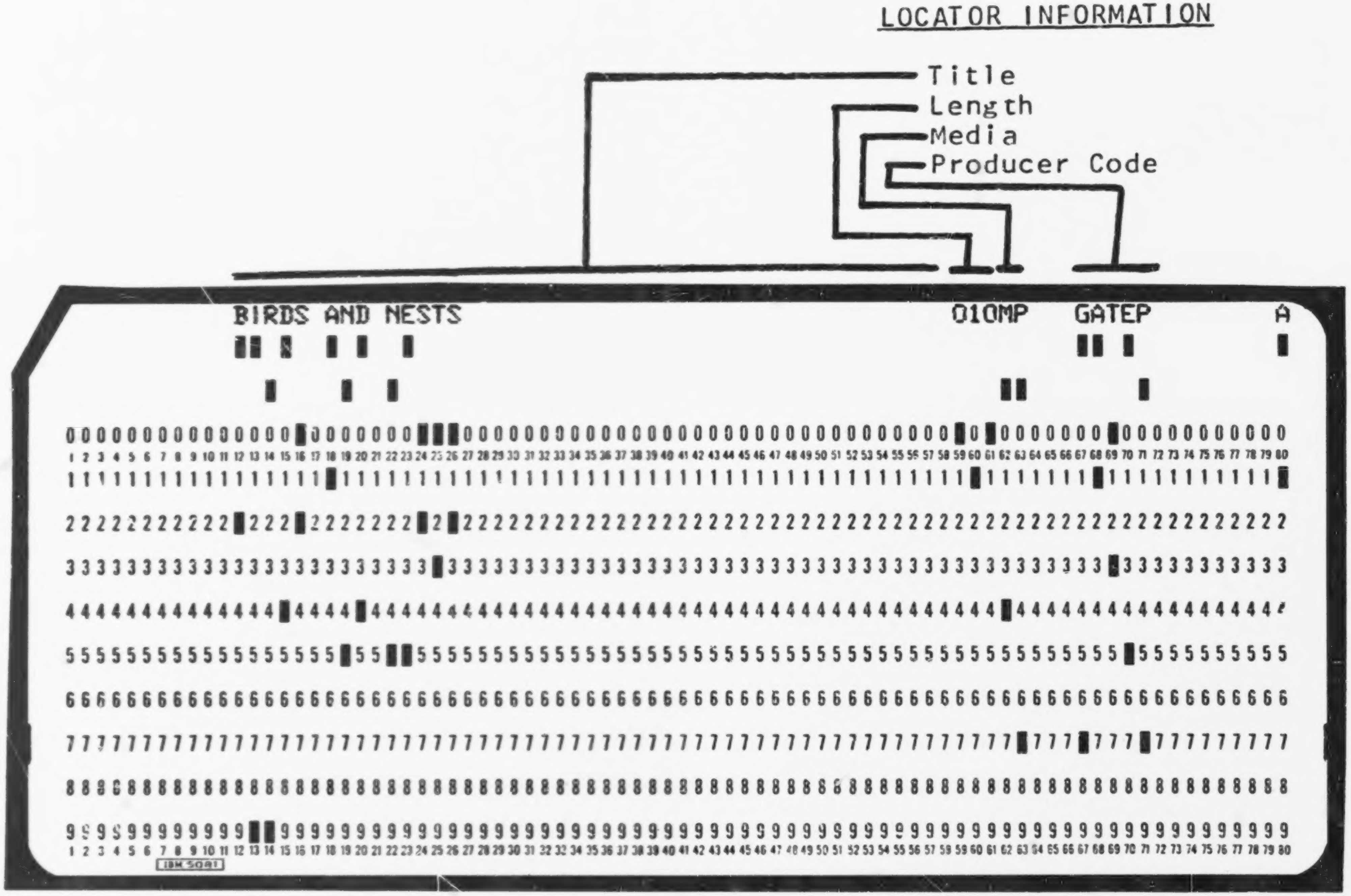
ANNOTATION (5): A personal view of a cavalry officer and his role in Vietnam. Daily activities and problems faced by him and his troops.

SERIES (4): Saga of Western Man

NOTE CHANGE OF ADDRESS HERE

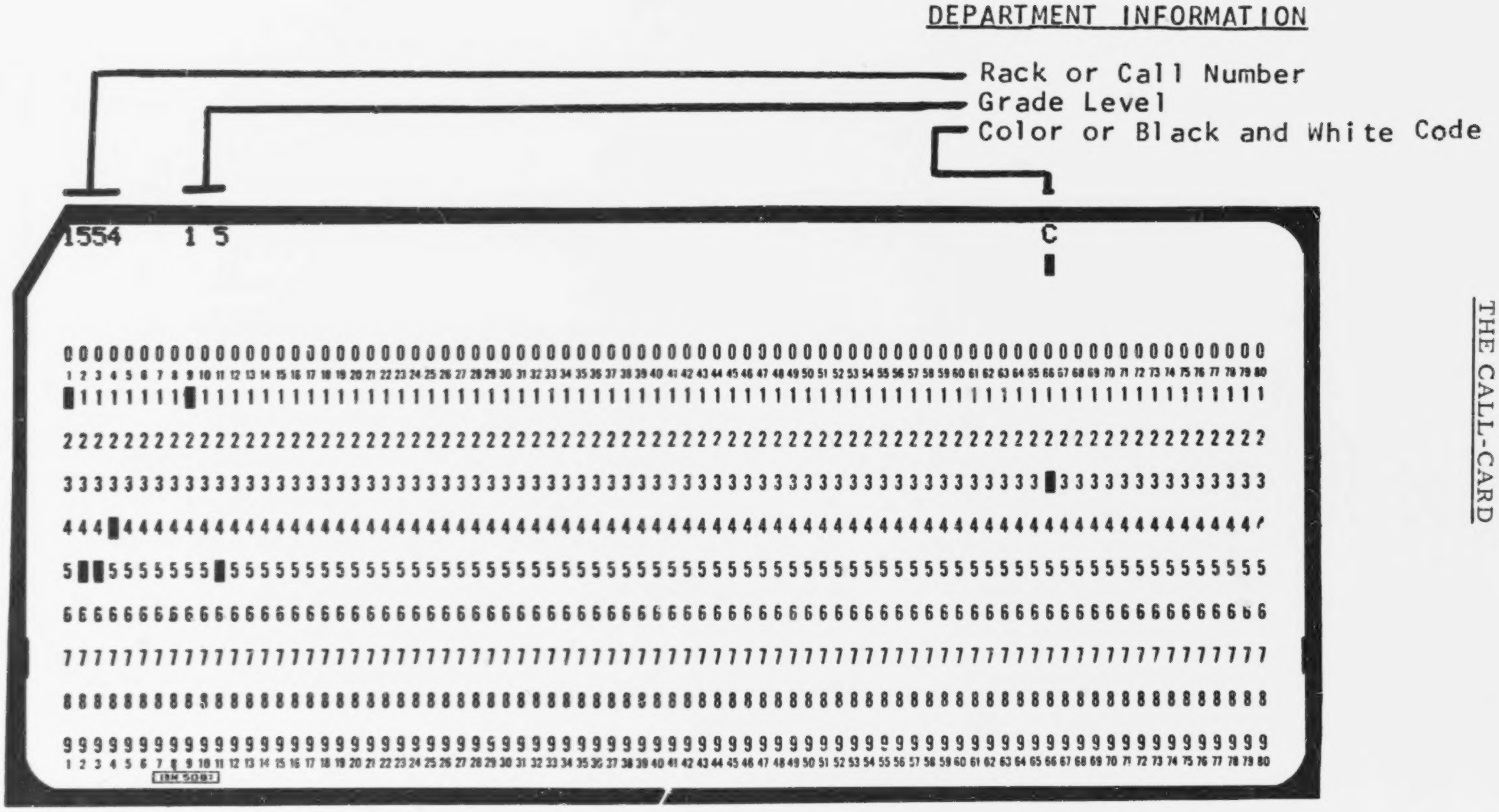
A B C D E F G H I J K 5 6

THE CALL-CARD


LOCATOR INFORMATION
Title
Length
Media
Producer Code
BIRDS AND NESTS
010MP
GATEP
A
IBM 5081

NOTE: The above items MUST be on the call-card in order to match its counterpart on the master tape file.

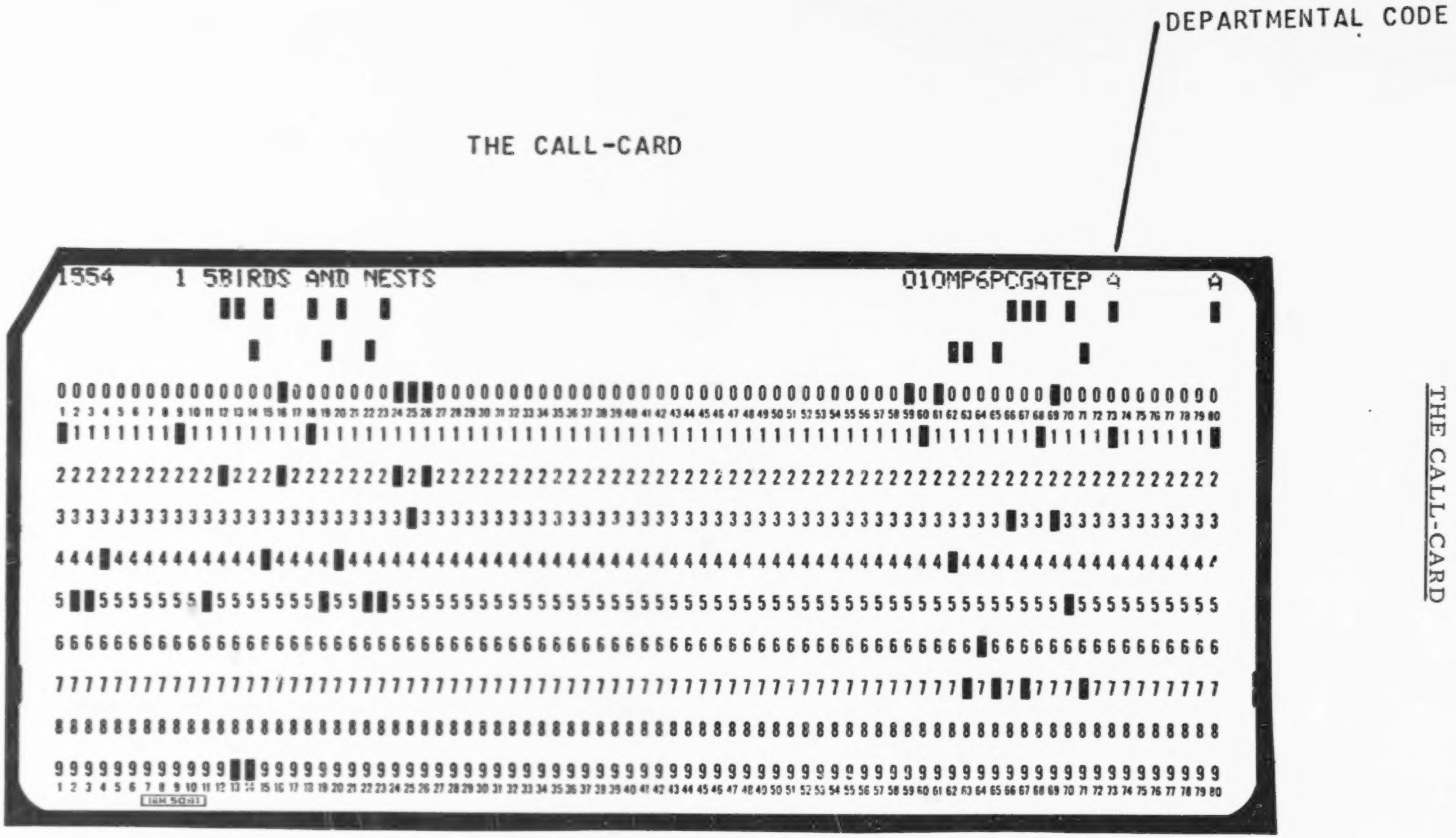
THE CALL-CARD


DEPARTMENT INFORMATION
Rack or Call Number
Grade Level
Color or Black and White Code
1554
1 5
C
IBM 5081

NOTE: The above items MAY be added to the call-card in order to reflect departmental information.

THE CALL-CARD

THE CALL-CARD


DEPARTMENTAL CODE
1554 1 5BIRDS AND NESTS
010MP6PCGATEP 4
A
IBM 5081

NOTE: This card reflects the locator information, departmental information and other codes needed to identify the piece after it has been located on the master tape file.

LEAD CARDS

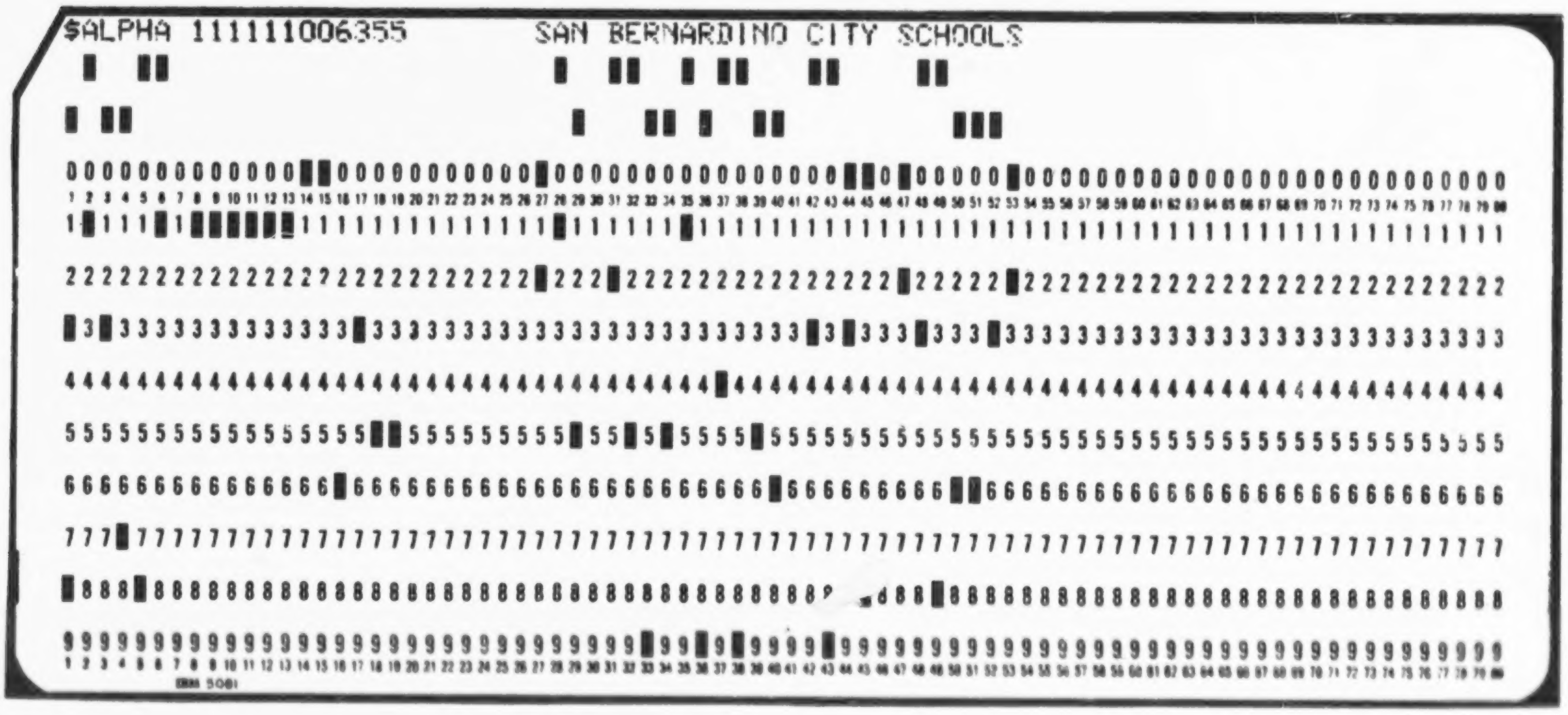
A. Instructions for Alphabetic Listings

COLUMN		YES	NO
1-6	$ALPHA		
7	Blank		
	Answer the question yes or no.		
8	Do you want grade level indication?	____	____
9	Do you want department number indication?	____	____
10	Do you want annotations?	____	____
11	Do you want the line, "See series title for annotations?	____	____
12	Do you want X cards to be read from the tape?	____	____
13	Do you want media interpreted in series listings? (Refer to explanation in column 10 of Subject Matter Instructions)	____	____
14	Do you want X cards following call cards to be interpreted? (This over-rides the answer to No. 12.)	____	____
15	Do you want a space left between the letters of the alphabet?	____	____
	If the answer to No. 9 is yes, answer 16-19.		
16	In what column is the zone punch indicating extra reels? (This must be shown in some column that contains Numbers 1-8.)	____	____
17	In which column does department number start?	____	____
18	In which column does department number end?	____	____

19 Indicate the total number of columns in the department number. (This includes both alpha and numeric.) ___ ___

Put a card at the end of the Alphabetic Listing with $END in columns 1-4

SAMPLE



$ALPHA 111111006355 SAN BERNARDINO CITY SCHOOLS

- -

EXAMPLE OF TWO-COLUMN PRINT-OUT

```
BIG HARVEST - THE STORY OF AGRICULTURE               18 MIN
                                               RENTAL  5.50
   GIVES THE AMERICAN FARMER'S CONTRIBUTION TO U S DEVEL-
   OPMENT.  CONTRASTS THE PIONEER FARMER'S RELATIONSHIP
   TO HIS LAND WITH THAT OF THE MODERN FARMER.
      PROD-TWCF        DIST-EBF                        1947


BIG LAND ANIMALS OF NORTH AMERICA                    11 MIN
                                         COLOR RENTAL  6.00
   LARGER ANIMALS OF NORTH AMERICA ARE SHOWN IN NATURAL
   HABITAT.  INCLUDES THE MOUNTAIN SHEEP AND GOATS, DEER,
   ELK, MOOSE, CARIBOU, REINDEER, BUFFALOES AND BEARS.
      PROD-EBF         DIST-EBF                        1956


BIG MOMENT IN SPORTS, THE, VOL 1                     28 MIN
                                               RENTAL  7.50
   BUD PALMER AND VIN SCULLY NARRATE EIGHT EVENTS IN
   SPORTS HISTORY, INCLUDING 1951 GIANT-DODGER BASEBALL
   PLAY-OFF, 1938 WAR ADMIRAL-SEA BISCUIT HORSE RACE,
   PANCHO GONZALES' VICTORY OVER TED SCHROEDER IN 1949
   TENNIS CHAMPIONSHIPS, 1945 NAVY-NOTRE DAME FOOTBALL
   GAME AND ROGER BANNISTER'S FOUR-MINUTE MILE IN 1954.
      PROD-SF          DIST-SF                         1959


BIG MOMENT IN SPORTS, THE, VOL 2                     28 MIN
                                               RENTAL  7.50
   BUD PALMER AND VIN SCULLY NARRATE SEVEN EVENTS IN
   SPORTS HISTORY, INCLUDING SUGAR RAY ROBINSON'S 1951
   MATCH WITH GERHART HECHT IN BERLIN, THE STORY OF WILT
   CHAMBERLAIN, THE NEW YORK GIANT'S LAST BASEBALL GAME
   IN THE POLO GROUNDS AND THE CASE OF THE TWELFTH MAN
   ON THE FOOTBALL FIELD IN THE RICE-ALABAMA GAME.
      PROD-SF          DIST-SF                         1960


BIG MOMENT IN SPORTS, THE, VOL 3                     28 MIN
                                               RENTAL  7.50
   SHOWS EIGHT GREAT EVENTS IN SPORTS HISTORY, SUCH AS
   JIM BROWNS'S FOUR TOUCHDOWNS AGAINST THE CARDINALS AND
   CANADA'S DEFEAT OF RUSSIA FOR THE WORLD AMATEUR
   HOCKEY CHAMPIONSHIP IN PRAGUE.
      PROD-SF          DIST-SF                         1963


BIG NUMBERS                                          30 MIN
                                                RENTAL 7.50
   DEMONSTRATES THE IMPORTANCE OF VERY LARGE AND VERY
   SMALL NUMBERS.  ILLUSTRATES THE MEANING, APPLICATION
   AND SIGNIFICANCE OF EXPONENTS AND POWERS.  DISCUSSES
   ''PERFECT NUMBERS'' AND EUCLID'S FORMULA FOR FINDING
   THEM.
   FROM THE UNDERSTANDING NUMBERS SERIES.
      PROD-NET         DIST-IU         PRODN-UMICH     1955


BIG TRAINS ROLLING                                   26 MIN
                                         COLOR RENTAL  8.50
   CONSIDERS THE EARLY DEVELOPMENT OF THE RAILROAD AND
   ITS IMPORTANCE TO THE GROWTH OF THIS COUNTRY.  EARLY
   RAILROADS ARE SHOWN AND A CROSS-COUNTRY TRIP ON A
   STREAMLINER IS PORTRAYED.
      PROD-AAR         DIST-AAR


BIG WORLD                                            11 MIN
                                         COLOR RENTAL  6.00
   ANSWERS THE SIMPLE QUESTIONS OF A CHILD ABOUT THE
   SIZE, SHAPE AND SURFACE OF THE WORLD.  A PRIMARY GLOBE
   IS USED AS A VISUAL AID.
      PROD-EH          DIST-EH


BILL OF RIGHTS OF THE UNITED STATES, THE             20 MIN
                                         COLOR RENTAL  8.00
   SUMMARIZES THE LONG STRUGGLE FOR PERSONAL RIGHTS WHICH
   LED TO THE BILL OF RIGHTS.  SHOWS THESE FIRST TEN
   AMENDMENTS TO BE VITAL SAFEGUARDS OF FREEDOM AGAINST
   THE TEMPER OF MEN'S MINDS THROUGHOUT HISTORY.
      PROD-EBF         DIST-EBF                        1956


BILLY MITCHELL                                       26 MIN
                                               RENTAL  7.50
   USES RARE ACTUALITY FOOTAGE TO PORTRAY THE PERSONAL
   LIFE AND HISTORY-MAKING DEEDS OF BILLY MITCHELL.
   FROM THE BIOGRAPHY SERIES.
      PROD-WOLPER      DIST-SF                         1965
```

```
BIOGRAPHY OF A FISH                                  10 MIN
                                               RENTAL  5.00
   SHOWS THE LIFE CYCLE OF THE STICKLEBACK.  ILLUSTRATES
   HOW THE MALE BUILDS A NEST, FINDS A MATE WHO LAYS THE
   EGGS, DRIVES HER AWAY AND GUARDS THE NEST UNTIL THE
   EGGS HATCH.
      PROD-ARGO        DIST-SF                         1950


BIOGRAPHY OF A MOTION PICTURE CAMERA, THE            22 MIN
                                               RENTAL  6.50
   TRACES THE DEVELOPMENT OF THE MOTION PICTURE CAMERA,
   SHOWING THE FIRST EFFORTS OF DR MAREY OF FRANCE AND
   EDWARD MUYBRIDGE OF THE U S.  INCLUDES THE WORK OF
   THOMAS EDISON AND OF LOUISE LUMIERE ON CAMERAS AND
   PROJECTORS.
      PROD-AFFLMS      DIST-AFFLMS                     1947


BIOGRAPHY OF A ROOKIE                                55 MIN
                                               RENTAL 15.00
   FOLLOWS THE CAREER OF WILLIE DAVIS OF THE LOS ANGELES
   DODGERS FROM THE DAY HE WAS DISCOVERED.  EMPHASIZES
   TECHNIQUES USED IN HIS TRAINING.
      PROD-WOLPER      DIST-SF                         1964


BIOGRAPHY OF THE UNBORN                              17 MIN
                                               RENTAL  5.50
   PHOTOMICROGRAPHY, ANIMATION, LIVE PHOTOGRAPHY AND
   X-RAYS RECORD THE DEVELOPMENT OF THE EMBRYO AND THE
   FETUS IN THE MOTHER'S WOMB.
      PROD-EBF         DIST-EBF                        1956


BIOLOGY PLUS                                         39 MIN
                                               RENTAL  9.50
   A FILMED RECORD OF TEACHING AND LEARNING ACTIVITIES IN
   A HIGH SCHOOL BIOLOGY CLASS THROUGHOUT A SCHOOL YEAR.
      PROD-USOE        DIST-DUART      PRODN-UIMPS     1962


BIRD HOMES                                           11 MIN
                                         COLOR RENTAL  6.00
   SHOWS DIFFERENT KINDS OF BIRD HOMES, THE HABITATS IN
   WHICH THEY CAN BE FOUND, AND THE TYPES OF MATERIALS
   USED IN NEST BUILDING.
      PROD-EBF         DIST-EBF                        1957


BIRD HOUSES AND FEEDERS                              12 MIN
                                         COLOR RENTAL  6.00
   SEE SERIES TITLE FOR ANNOTATION.
   FROM THE SCIFNCE FOR CHILDREN SERIES.
      PROD-CENCO       DIST-CENCO


BIRD IDENTIFICATION, PT 1                            12 MIN
                                         COLOR RENTAL  6.00
   SEE SERIES TITLE FOR ANNOTATION.
   FROM THE SCIENCE FOR CHILDREN SERIES.
      PROD-CENCO       DIST-CENCO


BIRD IDENTIFICATION, PT 2                            12 MIN
                                         COLOR RENTAL  6.00
   SEE SERIES TITLE FOR ANNOTATION.
   FROM THE SCIENCE FOR CHILDREN SERIES.
      PROD-CENCO       DIST-CENCO


BIRD'S NESTS                                         12 MIN
                                         COLOR RENTAL  6.00
   SEE SERIES TITLE FOR ANNOTATION.
   FROM THE SCIENCE FOR CHILDREN SERIES.
      PROD-CENCO       DIST-CENCO


BIRDS AND ETCHING                                     5 MIN
                                         COLOR RENTAL  5.00
   TWO ELEMENTARY SCHOOL CHILDREN DEMONSTRATE THE METHOD
   OF CRAYON ETCHING, USING BIRDS FOR INSPIRATION.
   FROM THE CHILD ART AND NATURE SERIES.
      PROD-BACH        DIST-BAILEY     PRODN-SCHINL    1957


BIRDS ARE INTERESTING                                11 MIN
                                         COLOR RENTAL  6.00
   PRESENTS SOME OF THE BASIC BIOLOGICAL CONCEPTS CON-
   CERNING BIRDS.  PROVIDES A SYSTEMATIC ANALYSIS OF
```

B. Instruction for Subject Matter Listings

COLUMN		YES	NO
1-6	$SUBJT		
7	Blank		
	Answer each of the following questions yes (1) or no (0).		
8	Do you want grade level indication?	___	___
9	Do you want department numbers shown?	___	___
10	Do you want media interpreted? (Media interpreted means that motion pictures will say 000 MIN, and filmstrips will say 000 FRS. If you answer no, motion pictures will say 000 MP, and filmstrips will say 000 FS.)	___	___
11	Do you want media uninterpreted? (10 and 11 cannot both be yes, but both can be no.)	___	___
12	Do you want stock indication? (B for black and white or C for color.)	___	___
13	Are there any "user" cards in the deck? (Any titles that were not made from the master tape.)	___	___
	The following questions are to be answered with a number. If No. 9 is answered no, 14-17 will be left blank. If No. 9 is answered yes, 14-17 must be answered.		
14	In which column is the zone punch indicating extra reels? (This must be shown in some column that contains Numbers 1-8.)	___	___
15	In which column does department number start?	___	___
16	In which column does department number end?	___	___
17	Indicate the total number of columns in the department number. (This includes both alpha and numeric.)	___	___

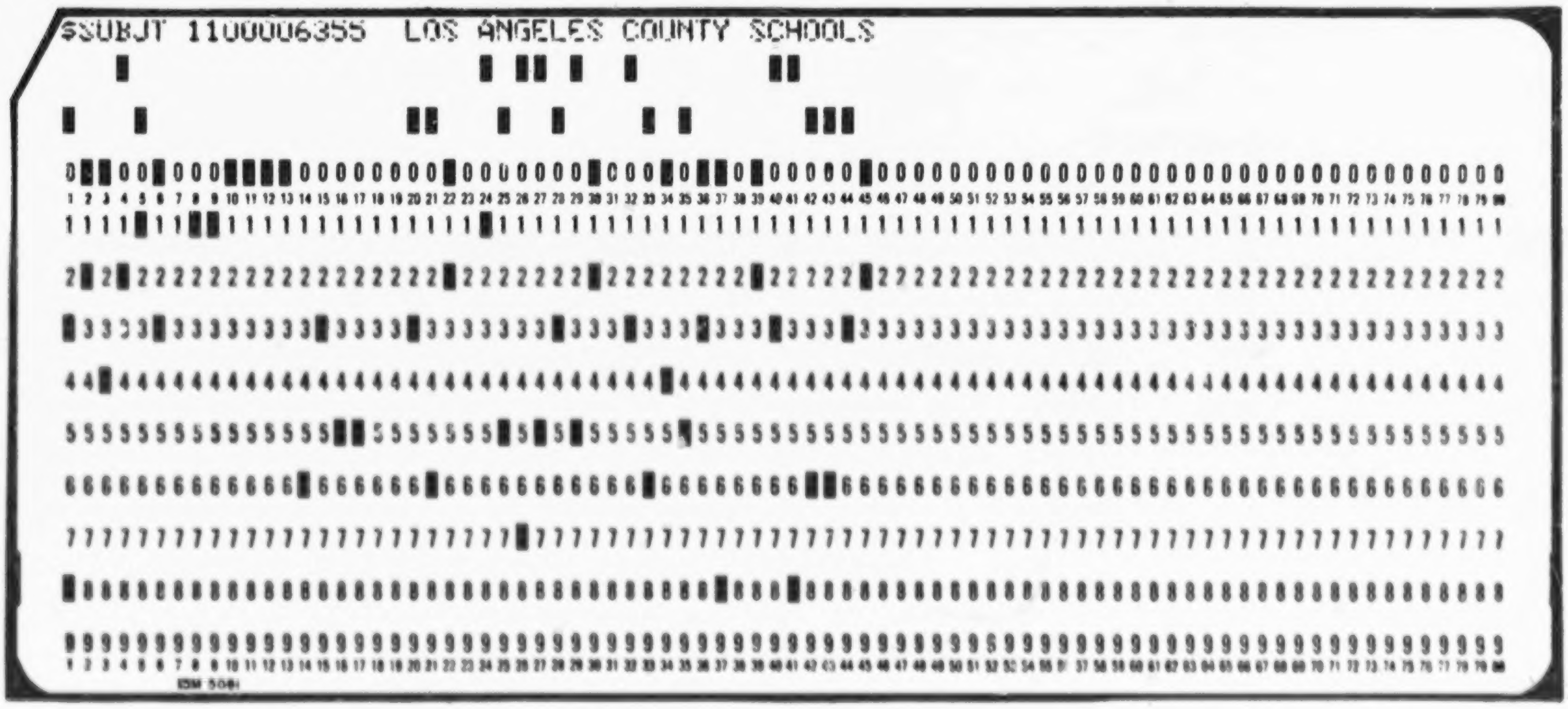
The usual order of the data is as follows:

Department No.____Film Title______________________Grade Level_____
or
Number of minutes or frames

If film title is to come before department number, put A in column 9 instead of No. 1.

Put a card at the end of the Subject Matter deck with $END in columns 1-4.

SAMPLE

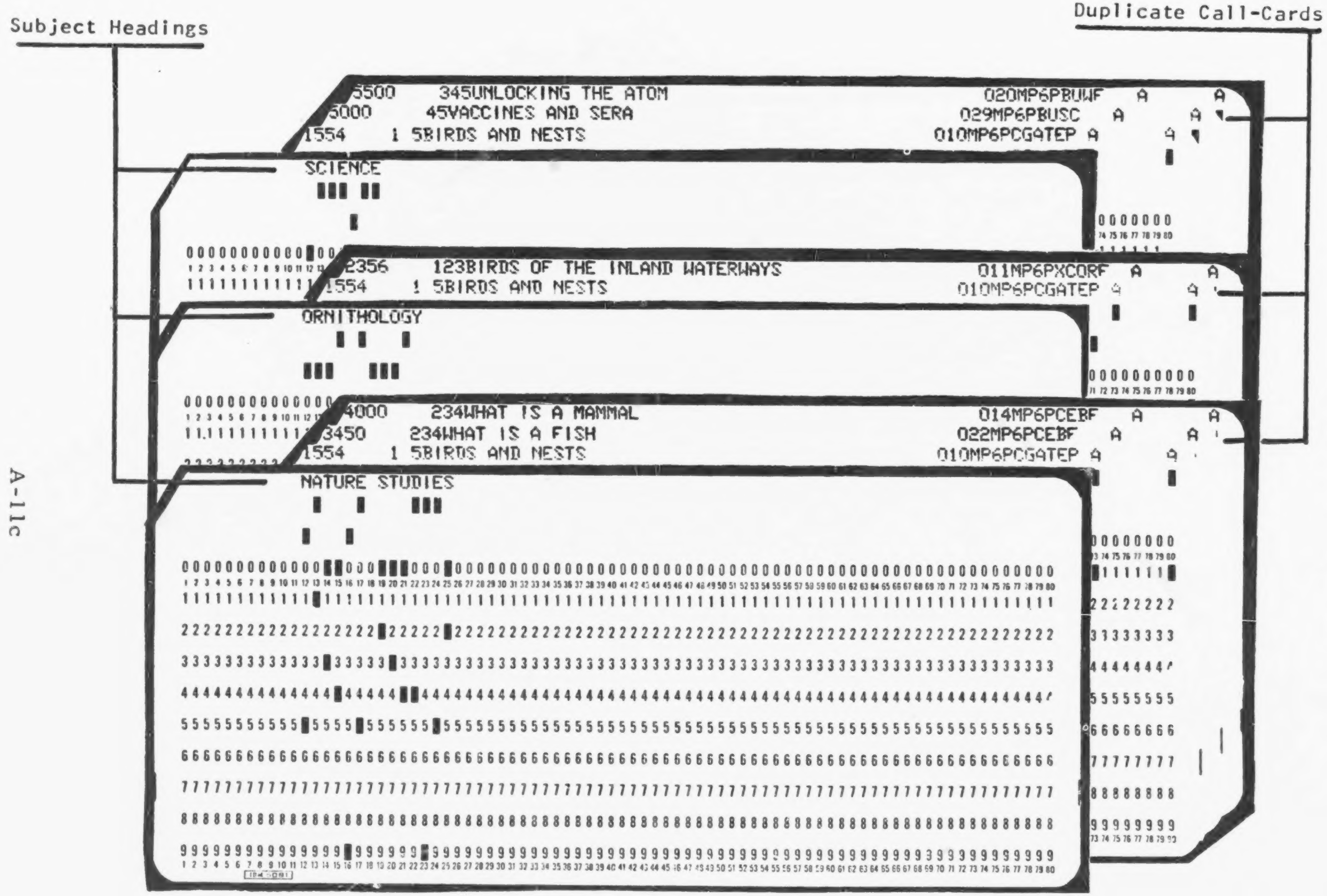


```
$SUBJT 1100006355  LOS ANGELES COUNTY SCHOOLS
```

- -

SUBJECT MATTER INDEX

SUBJECT MATTER INDEX
(Hand-filed)


Subject Headings
Duplicate Call-Cards
5500 345UNLOCKING THE ATOM 020MP6PBUWF A A
5000 45VACCINES AND SERA 029MP6PBUSC A A
1554 1 5BIRDS AND NESTS 010MP6PCG9TEP A A
SCIENCE
2356 123BIRDS OF THE INLAND WATERWAYS 011MP6PXCORF A A
1554 1 5BIRDS AND NESTS 010MP6PCGATEP A A
ORNITHOLOGY
4000 234WHAT IS A MAMMAL 014MP6PCEBF A A
3450 234WHAT IS A FISH 022MP6PCEBF A A
1554 1 5BIRDS AND NESTS 010MP6PCG9TEP A A
NATURE STUDIES

NOTE: Since this file is hand-filed, duplicate call-cards may be inserted after as many subject headings as desired.

SUBJECT MATTER INDEX
(Example 1)

```
NATURE STUDY

   BIRDS AND NESTS                                  10 MIN
   BIRDS OF THE INLAND WATERWAYS                    11 MIN
   WHAT IS A FISH                                   22 MIN
   WHAT IS A MAMMAL                                 14 MIN

ORNITHOLOGY

   BIRDS AND NESTS                                  10 MIN
   BIRDS OF THE INLAND WATERWAYS                    11 MIN

SCIENCE

   BIRDS AND NESTS                                  10 MIN
   BIRDS OF THE INLAND WATERWAYS                    11 MIN
   UNLOCKING THE ATOM                               20 MIN
   VACCINES AND SERA                                29 MIN
```

NOTE: Prints headings, titles and lengths only.

SUBJECT MATTER INDEX

(Example 2)

```
     NATURE STUDY

1554 BIRDS AND NESTS                                        PR-CO
2359 BIRDS OF THE INLAND WATERWAYS                          PR-IN-JR
3450 WHAT IS A FISH                                         IN-JR-SR
4000 WHAT IS A MAMMAL                                       IN-JR-SR

     ORNITHOLOGY

1554 BIRDS AND NESTS                                        PR-CO
2359 BIRDS OF THE INLAND WATERWAYS                          PR-IN-JR

     SCIENCE

1554 BIRDS AND NESTS                                        PR-CO
2359 BIRDS OF THE INLAND WATERWAYS                          PR-IN-JR
550  UNLOCKING THE ATOM                                     JR-SR-CO
5000 VACCINES AND SERA                                      SR-CO
```

NOTE: Prints headings, order numbers, titles and grade level indications.

SUBJECT MATTER INDEX
(Example 3)

NATURE STUDY

BIRDS AND NESTS	PR-CO
BIRDS OF THE INLAND WATERWAYS	PR-IN-JR
WHAT IS A FISH	IN-JR-SR
WHAT IS A MAMMAL	IN-JR-SR

ORNITHOLOGY

BIRDS AND NESTS	PR-CO
BIRDS OF THE INLAND WATERWAYS	PR-IN-JR

SCIENCE

BIRDS AND NESTS	PR-CO
BIRDS OF THE INLAND WATERWAYS	PR-IN-JR
UNLOCKING THE ATOM	JR-SR-CO
VACCINES AND SERA	SR-CO

NOTE: Prints headings, titles and grade level indications.

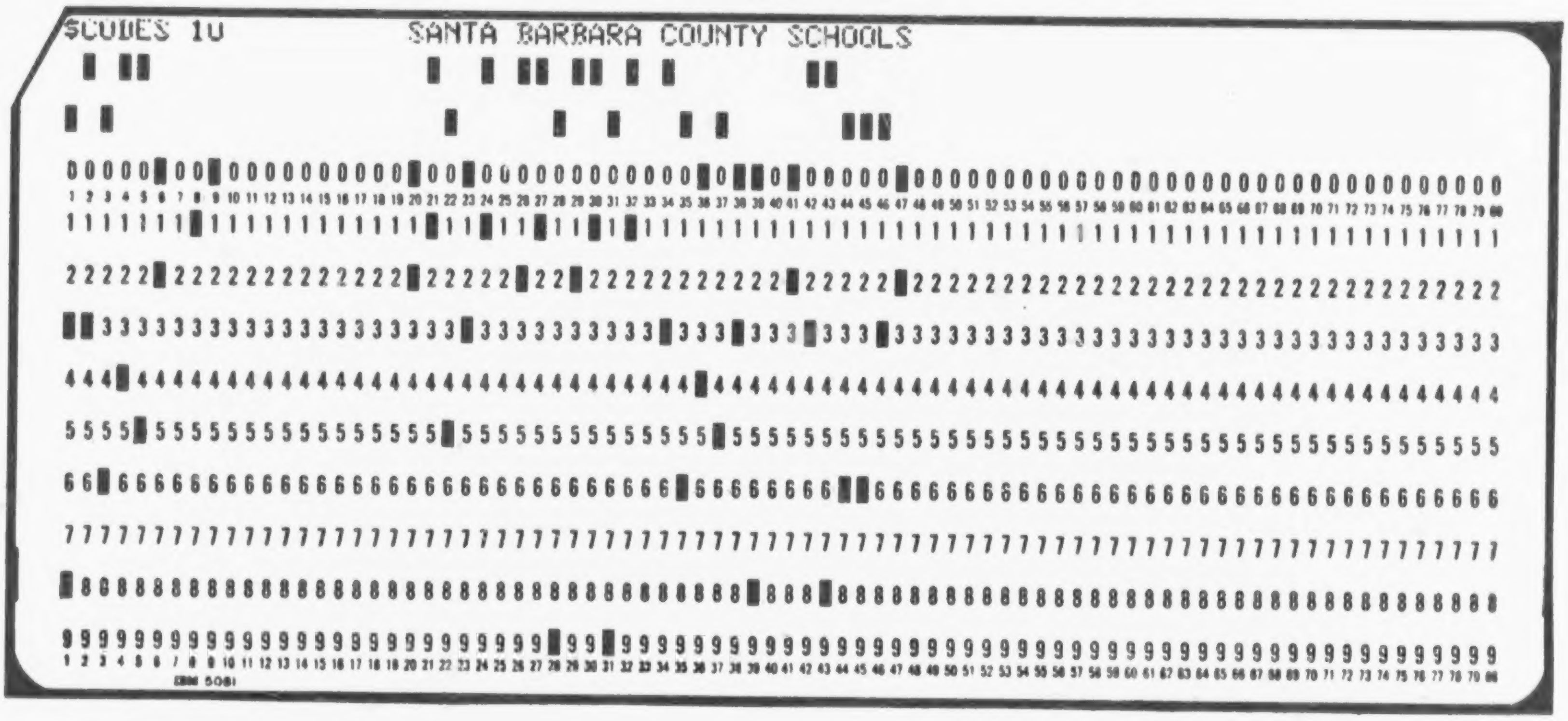
SUBJECT MATTER TWO-COLUMN PRINT-OUT

```
ACADEMY AWARD WINNERS

ARCTIC REGION AND ITS POLAR BEARS                C  28 MIN
BESPOKE OVERCOAT, THE                            B  30 MIN
FACE OF LINCOLN, THE                             B  22 MIN
GLASS                                            C  11 MIN
GOLDEN FISH, THE                                 C  20 MIN
HAPPY ANNIVERSARY                                B  12 MIN
LARGE ANIMALS OF THE ARCTIC                      C  22 MIN
LEMMINGS AND ARCTIC BIRD LIFE, THE               C  21 MIN
MARC CHAGALL                                     C  26 MIN
NATURE'S HALF ACRE                               C  33 MIN
NEIGHBORS                                        C   9 MIN
OCCURRENCE AT OWL CREEK BRIDGE, AN               B  27 MIN
RED BALLOON, THE                                 C  34 MIN
SEA AROUND US, THE                               C  61 MIN
SEAL ISLAND                                      C  27 MIN
SEAWARDS THE GREAT SHIPS                         C  29 MIN
THURSDAY'S CHILDREN                              B  22 MIN
TRUE STORY OF THE CIVIL WAR                      B  33 MIN


ACTORS AND ACTING
   (SEE ALSO DRAMA, THEATRE)

CRADLE OF GENIUS                                 B  26 MIN
MASK OF COMEDY, THE                              C  17 MIN


ADOLESCENCE

SADDLEMAKER, THE                                 C  16 MIN


ADVENTURE

LOUISIANA STORY                                  B  77 MIN
PALLE ALONE IN THE WORLD                         B  20 MIN
THREE PIRATES BOLD                               C  15 MIN


AFRICA

AFRICAN VILLAGE                                  C  17 MIN
ANIMALS UNLIMITED                                C  20 MIN
JEEP JUNGLE SAFARI                               C  30 MIN
RIVER NILE, THE                                  C  54 MIN
TROPICAL AFRICA                                  C  29 MIN


AGED

STRING BEAN, THE                                 C  17 MIN


AGRICULTURE

CATTLE RANCH                                     C  20 MIN
RICE                                             C  30 MIN


ANIMALS

ANIMALS UNLIMITED                                C  20 MIN
ARCTIC REGION AND ITS POLAR BEARS                C  28 MIN
AUTUMN                                           B  14 MIN
BADGER'S BAD DAY, A                              C  12 MIN
BEAVER DAM                                       C  16 MIN
BETWEEN THE TIDES                                C  22 MIN
BIG GAME CAMERA HOLIDAY                          C  14 MIN
BLACK PATCH                                      B  18 MIN
CORRAL                                           B  11 MIN
DOWN IN THE FOREST                               B   6 MIN
HOUND THAT THOUGHT HE WAS A RACCOON, THE         C  48 MIN
HUNTING THE FOOTHILLS FLYWAY                     C  14 MIN
JEEP JUNGLE SAFARI                               C  30 MIN
GREAT ADVENTURE, THE                             B  75 MIN
HIGH ARCTIC BIOME, THE                           C  23 MIN
LAND OF THE RED GOAT                             C  16 MIN
LARGE ANIMALS OF THE ARCTIC                      C  22 MIN
LEMMINGS AND ARCTIC BIRD LIFE, THE               C  21 MIN
LARGE ANIMALS OF THE ARCTIC                      C  22 MIN
LEMMINGS AND ARCTIC BIRD LIFE, THE               C  21 MIN
MUSEUM MAN                                       C  19 MIN
MUSICAL RIDE, THE                                C  19 MIN
NATURE'S HALF ACRE                               C  33 MIN
NATURE'S STRANGEST CREATURES                     C  16 MIN
NICK                                             C  29 MIN
SADDLEMAKER, THE                                 C  16 MIN
SEAL ISLAND                                      C  27 MIN
STARS IN STRIPES                                 C  11 MIN
VOICE OF THE DESERT, THE                         C  22 MIN
WILDLIFE IN THE ROCKIES                          C  13 MIN


ANIMATED FILMS
   SEE MOTION PICTURES ANIMATED


ANTARCTIC

ADELIE PENGUINS OF THE ANTARCTIC                 C  20 MIN


ANTHROPOLOGY

LIVING STONE                                     C  33 MIN


ARABIA

MIDDLE EAST                                      C  27 MIN


ARCHAEOLOGY

SILENT ONES, THE                                 C  25 MIN


ARCHITECTURE

ENGLAND OF ELIZABETH, THE                        C  26 MIN
HOW TO LOOK AT A CITY                            B  30 MIN
NEPAL - HIMALAYAN KINGDOM                        C  18 MIN
PORTRAIT OF MEXICO. A                            C  30 MIN
SKYSCRAPER                                       C  20 MIN
TWO BAROQUE CHURCHES IN GERMANY                  C  11 MIN
WHITE HOUSE STORY, THE                           B  50 MIN


ARCTIC

ARCTIC REGION AND ITS POLAR BEARS                C  28 MIN
HIGH ARCTIC BIOME, THE                           C  23 MIN
LARGE ANIMALS OF THE ARCTIC                      C  22 MIN
LEMMINGS AND ARCTIC BIRD LIFE, THE               C  21 MIN
LIVING STONE                                     C  33 MIN


ART

ARTIST'S PROOF                                   C  25 MIN
CHILDREN'S DREAMS                                C  15 MIN
ENGLAND OF ELIZABETH, THE                        C  26 MIN
FACE OF LINCOLN, THE                             B  22 MIN
FOURTEEN NINETY-TWO, PT 1, THE                -- C  14 MIN
NEPAL - HIMALAYAN KINGDOM                        C  18 MIN
PORTRAIT OF MEXICO, A                            C  30 MIN
```

C. Instructions for Printing Producer Codes

COLUMN		YES	NO
1-6	$CODES		
7	Blank		
8	Do you want alphabetical grouping space?	____	____
9	Do you want addresses?	____	____

SAMPLE



$CODES 10 SANTA BARBARA COUNTY SCHOOLS

PRODUCER CODES

ABCTV	AMER BROADCASTING CO, TV
AC	AUERBACH CORP
ACA	ACADEMY FILMS
ACI	ACI PRODUCTIONS
ADAMS	DAVID ADAMS
ADAMSP	BILL ADAMS PRODUCTIONS
ADOI	AUSTL DEPT OF INTERIOR
AF	ASSOCIATION FILMS
AFP	AMER FILM PRODUCTIONS INC
ALEF	JOHANNA ALEMANN FILMS
AMFS	AMER FRIENDS SERV
ANAIB	AUSTL NEWS AND INFORMATION BUREAU
ARTHUR	GEORGE K ARTHUR - GO PICTURES
ATWOOD	HARRY ATWOOD
BAF	BAILEY FILMS
BARN	CARROLL BARNES PRODUCTIONS
BF	BRANDON FILMS
BIS	BRITISH INFORMATION SERV
BMC	BOOK OF THE MONTH CLUB
BOVEY	MARTIN BOVEY FILMS
BPCO	BRITISH PETROLEUM CO, LTD
BREST	GEORGE BREST AND CO
BRYAN	JULIEN BRYAN
BTF	BRITISH TRANSPORT FILMS
CAP	IVA CAPRINO
CAPAC	A P CLAUDON CAPAC PRODUCTIONS
CBSTV	COLUMBIA BROADCASTING CO
CDSFM	CENTRAL DOCUMENTARY FILM STUDIOS
CEP	CAMERA EYE PICTURES
CF	CHURCHILL FILMS
CFD	CLASSROOM FILM DISTRIBUTORS, INC
CFS	CREATIVE FILM SOCIETY
CH	CINEPIC HAWAII
CHAPM	CHAPMAN, CHRISTOPHER
CJV	JACOBY AND VAN DYKE CLARKE
CLOUSE	ROBERT CLOUSE ASSOC
CNTRPA	CENTROPA FILM
CON	CONTEMPORARY FILMS
COOPE	HARRY COOPER
CORF	CORONET FILMS
CORNLF	CORNELL FILM CO
CPC	COLUMBIA PICTURE CORP
CRAF	CRAWLEY FILMS LTD
CTFL	CANADIAN TRAVEL FILM LIBRARY
CWMS	COLONIAL WILLIAMSBURG
DALY	TOM DALY
DANCUL	DANISH CULTURE FILM PRODUCTIONS
DANISH	DANISH GOVT FILM OFFICE
DAVC	CARSON DAVIDSON
DEROCH	LOUIS DE ROCHEMONT ASSOC
DF	DIMENSION FILMS
DISNEY	WALT DISNEY PRODUCTIONS
DOWP	PAT DOWLING PICTURES
DUART	DU ART FILM LABS, INC
EAMES	CHARLES AND RAY EAMES
EBF	ENCYCLOPAEDIA BRITANNICA FILMS
EH	EDUCATIONAL HORIZONS
ELGAR	PETER ELGAR PRODUCTIONS
ENRICO	ROBERT ENRICO
ERSKIN	ROBERT ERSKINE
FA	FILM ASSOC OF CALIF
FDF	FORD FOUNDATION
FI	FILMS, INC
FINA	FINE ARTS PRODUCTIONS
FLAH	ROBERT FLAHERTY
FMCMP	FORD MOTOR CO
FON	FILMS OF THE NATIONS
GAKKEN	GAKKEN FILM CO
GJP	GROVER-JENNINGS PRODUCTIONS
GREENP	GREENPARK PRODUCTIONS
GRIERS	JOHN GRIERSON
HA	BERT HAANSTRA
HAERTS	PAUL HAESAERTS
HALAS	HALAS AND BATCHELOR
HANDY	JAM HANDY ORGAN
HAS	GUY D HASELTON
HAZAM	LOUIS J HAZAM
HENJEN	BJARNE AND ASTRID HENNING-JENSEN
HILBER	DAVID HILBERMAN
HIRSCH	TIBOR HIRSCH
HOL	THEODORE HOLCOMB
HOSTER	DON HOSTER
HRCH	HEALTH RESEARCH INC
HUBLEY	JOHN HUBLEY
HYATT	DONALD HYATT
IFB	INTERNATIONAL FILM BUREAU
IFF	INTERNATIONAL FILM FOUNDATION
INTF	INTERLUDE FILMS
JAJ	JOHNSON AND JOHNSON
JENSEN	JENSEN (HOWARD)
KLEIN	KLEINBERG FILMS
KORTY	JOHN KORTY
KROLL	NATHAN KROLL
KRUM	JOSEPH KRUMGOLD
LACBA	L A COUNTY BUREAU OF ADOPTIONS
LACCSC	COUNTY OF L A CIVIL SERV COMMISSION
LACCWS	COUNTY OF L A, DIVISION OF CHILD WELFARE SERVS
LAM	ALBERT LAMORISSE
LES	IRVING LESSER ENTERPRISES
LICHNR	MARVIN LICHTNER
LORNTZ	PARE LORENTZ
LUZ	EMANUEL LUZZATI
MATHSN	JAN MATHISEN
MCLN	NORMAN MC LAREN
MCNAMP	MCNAMARA PRODUCTIONS
MGHT	MC GRAW-HILL TEXTFILMS
MID	KEN MIDDLEHAM PRODUCTIONS
MINNMC	MINNEAPOLIS-MOLINE CO
MLA	MODERN LEARNING AIDS
MMOA	METROPOLITAN MUSEUM OF ARTS
MOMA	MUSEUM OF MODERN ART
MONK	NOEL MONKMAN
MORSE	MORSE PRODUCTIONS
MOT	MARCH OF TIME
MULTF	MULT-FILM
MYERS	DAVID MYERS
NAA	NORTH AMER AVIATION INC
NAOS	NATL ACADEMY OF SCIENCES
NBCTV	NATL BROADCASTING CO, TV
NET	NATL EDUCATIONAL TV, INC
NETFS	NET FILM SERVICE, IND UNIV
NETHIS	NETHERLANDS GOVT INFORMATION SERV
NEW	HENK NEWENHOUSE, INC
NEWERA	NEW ERA FILMS
NF	NORWOOD FILMS
NFBC	NATL FILM BOARD OF CANADA
NORDIS	NORDISK FILM JUNIOR
NYZS	N Y ZOOLOGICAL SOCIETY
OCRYES	JIM O'CONNOR AND TOM HAYES
OERTEL	CURT OERTEL

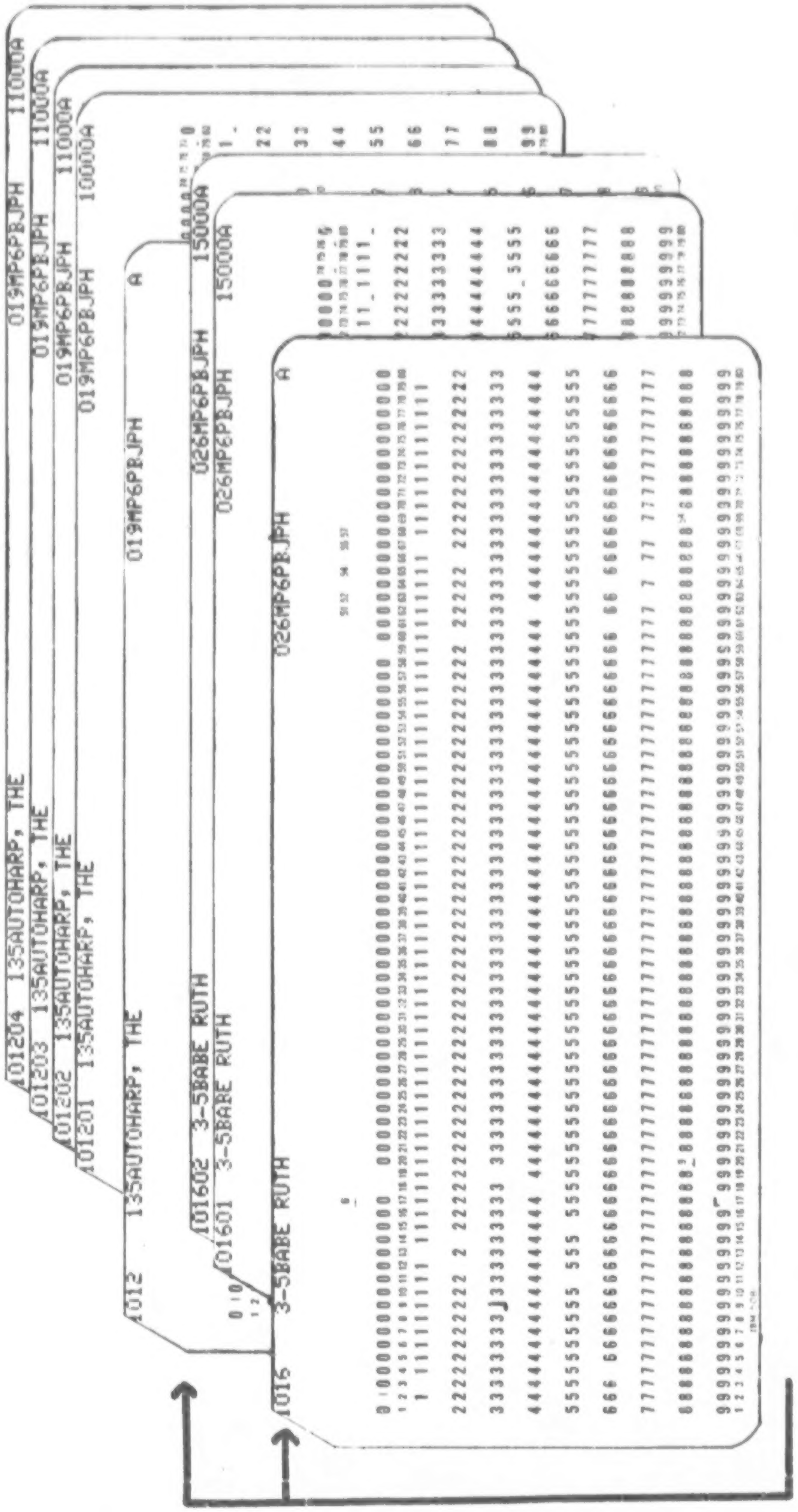
AN ALPHABETICAL CHECK OF FILM TITLES

ABC OF HAND TOOLS, THE, PT 1			874
ABC OF HAND TOOLS, THE, PT 2			874
ABC OF PUPPET MAKING - TYPE ONE PUPPETS -	--	NO-BCARD	874
ABC OF PUPPET MAKING - TYPE TWO PUPPETS -	--	NO-BCARD	874
ACCIDENT BEHAVIOR			874
ACID-BASE INDICATORS			874
ACT YOUR AGE - EMOTIONAL MATURITY			874
AFRICA IS MY HOME			874
AFRICAN GIRL - MALOBI			874
AGE OF DISCOVERY - ENGLISH, FRENCH AND	--	NO-BCARD	874
AGE OF DISCOVERY - SPANISH AND	--	NO-BCARD	874
AGE OF DISCOVERY, THE			874
ALCOHOL AND THE HUMAN BODY			874
ALCOHOL AND TOBACCO - WHAT THEY DO TO	--	NO-BCARD	874
ALLOY STEELS - A STORY OF THEIR DEVELOPMENT			874
AMERICAN LITERATURE - COLONIAL TIMES			874
AMERICAN LITERATURE - EARLY NATIONAL PERIOD			874
AMERICAN LITERATURE - REVOLUTIONARY TIMES			874
AMERICAN LITERATURE - THE REALISTS			874
ANATOMY OF AGGRESSION, THE			874
ANCIENT CITIES OF THE EAST			874
ANCIENT EGYPT			874
ANCIENT GREECE			874
ANCIENT ROME			874
ANCIENT WORLD INHERITANCE			874
ANCIENT WORLD INHERITANCE (2ND ED)			874
ANDREW JACKSON			874
ANIMAL HABITATS			874
ARAB MIDDLE EAST, THE			874
ARABIAN BAZAAR			874
ARE YOU READY FOR MARRIAGE			874
ART - DRY PAPER MODELING			874
ARTHROPODS - INSECTS AND THEIR RELATIVES			874
AS BOYS GROW			874
ASIAN EARTH			874
ASTEROIDS, COMETS AND METEORITES			874
ATOM AND BIOLOGICAL SCIENCE, THE			874
ATOM AND INDUSTRY, THE			874
ATOM AND MEDICINE, THE			874
ATOMIC ENERGY - INSIDE THE ATOM			874
ATOMIC RADIATION			874
AUTO BIOGRAPHY			874
AUTOMATION			874
BABY SITTER, THE			874
BACKFIRE			874
BACTERIA			874
BACTERIA			874
BACTERIA - FRIEND OR FOE			874
BACTERIA - LABORATORY STUDY			874
BANKS AND CREDIT			874
BASKETBALL FOR BOYS - FUNDAMENTALS			874
BASKETBALL FOR BOYS - TEAMPLAY			874
BASKETBALL IS FUN			874
BEACH AND SEA ANIMALS			874
BEACH AND SEA ANIMALS (2ND ED)			874
BEETHOVEN AND HIS MUSIC			874
BEGINNINGS OF VERTEBRATE LIFE			874
BEHAVIOR OF GASES			874
BEHIND THE SHADOWS			874
BENJAMIN FRANKLIN			874
BETTER BULLETIN BOARDS			874
BILL OF RIGHTS OF THE UNITED STATES, THE			874
BIRTH AND DEATH OF MOUNTAINS			874
BIRTH OF THE SOIL			874
BLIND AS A BAT			874

AN OMISSION CHECK

```
CHECK OF TITLES FOR       SANTA BARBARA COUNTY SCHOOLS-- MOTION PICTURES
                                 98      ABC OF PUPPET MAKING - (TYPE TWO PUPPETS) -  --  010MP6PC  BAILEY
                                 0       ALCOHOL AND TOBACCO - WHAT THEY DO TO        --  011MP6PB  UNKNWN
                                 1       ALLOY STEELS - A STORY OF THEIR DEVELOPMENT      020MP6PB  USDIBM
                                 8       ANATOMY OF AGGRESSION, THE                       029MP6PB  USIA
                                 9       ART - DRY PAPER MODELING                         018MP6PB  UOKLA
                                 8       BANKS AND CREDIT                                 022MP6PC  CORF
                                 0       BEHIND THE SHADOWS                               015MP6PB  NTBA
                                 8       BUENOS DIAS, CARMELIT - REV ED                   018MP6PB  IFB
                                 6       CASE OF THE MIDGUIDED KILLER                     011MP6PB  PGP
                                 4       CITRUS IN NUTRITION                              020MP6PC  SUNKST
                                 8       CITRUS ON PARADE                                 010MP6PC  SUNKST
                                 7       CIVIL WAR - 1863-1865                            016MP6PC  CORF
                                 6       COMMUNITY HEALTH IN ACTION                       022MP6PB  OFP
                                 7       DEATH OF PRESIDENT KENNEDY                       020MP6PB  HEARST
                                 9       DEPARTMENT OF HEALTH, EDUCATION AND WELFARE      132MP6PB  MGHT
                                 9       DIESEL, THE MODERN POWER (REV ED)                021MP6PB  USDIBM
 TOTAL MISSING   16
 TOTAL RECORDS  186
```

CALL CARDS ADAPTED TO INVENTORY RECORD

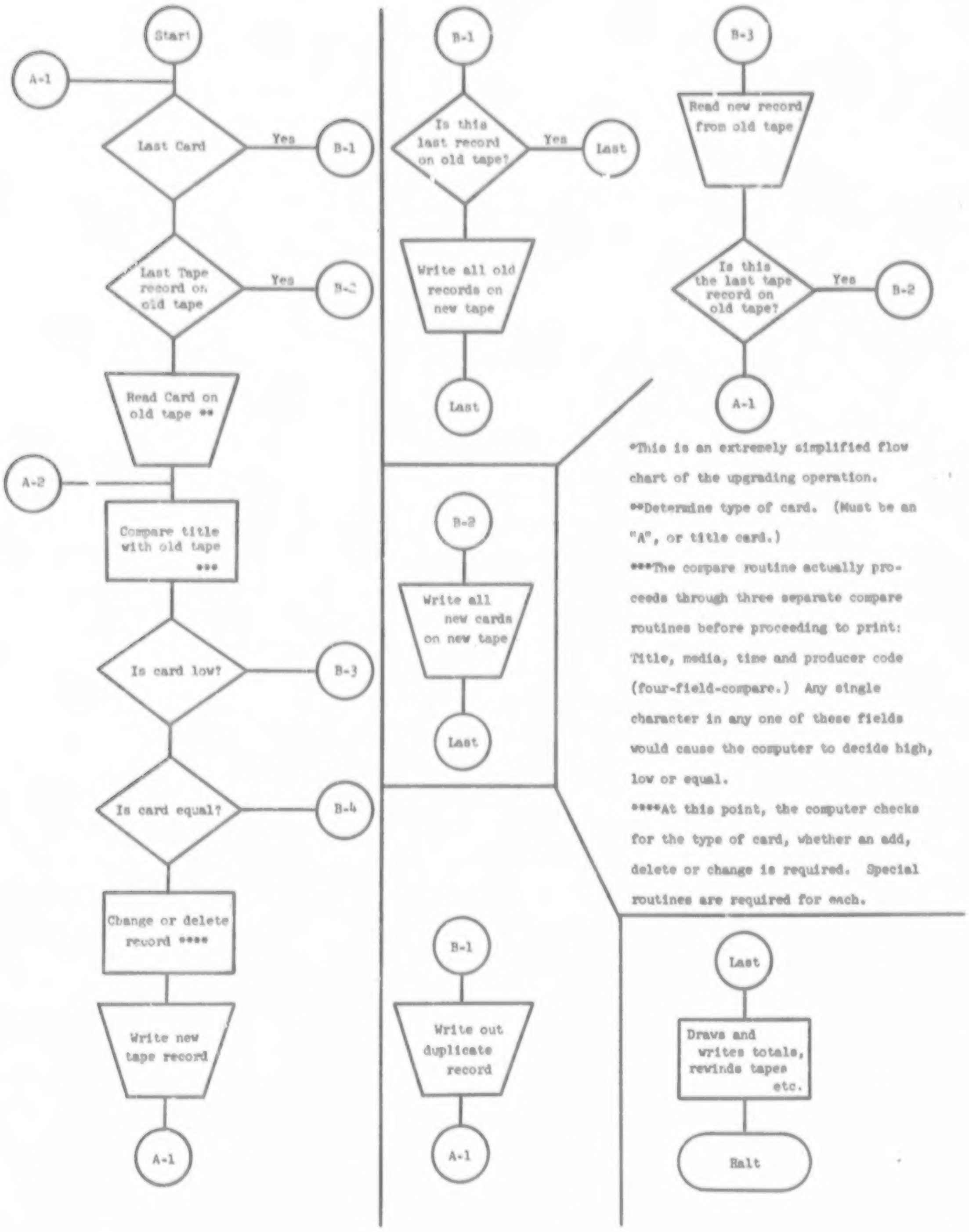


101204 135AUTOHARP, THE
019MP6PBJPH
11000A
101203 135AUTOHARP, THE
019MP6PBJPH
11000A
101202 135AUTOHARP, THE
019MP6PBJPH
11000A
101201 135AUTOHARP, THE
019MP6PBJPH
10000A
1012 135AUTOHARP, THE
019MP6PBJPH
A
101602 3-5BABE RUTH
026MP6PBJPH
15000A
101601 3-5BABE RUTH
026MP6PBJPH
15000A
1016 3-5BABE RUTH
026MP6PBJPH
A

Original call cards followed by inventory cards with print No. and purchase price inserted.

Columns	1 through 4	-	Rack or Order Number
"	5 and 6	-	Print Number
"	9 through 11	-	Grade Level
"	12 " 58	-	Title
"	59 " 65	-	Bio-data
"	66	-	Color Code
"	67 through 72	-	Producer Code
"	75 " 79	-	Purchase Price

FLOW CHART FOR UPDATING MASTER FILE*


Start
A-1
Last Card
Yes
B-1
Last Tape record on old tape
Yes
B-2
Read Card on old tape **
A-2
Compare title with old tape ***
Is card low?
B-3
Is card equal?
B-4
Change or delete record ****
Write new tape record
A-1
B-1
Is this last record on old tape?
Yes
Last
Write all old records on new tape
Last
B-2
Write all new cards on new tape
Last
B-1
Write out duplicate record
A-1
B-3
Read new record from old tape
Is this the last tape record on old tape?
Yes
B-2
A-1
Last
Draws and writes totals, rewinds tapes etc.
Halt

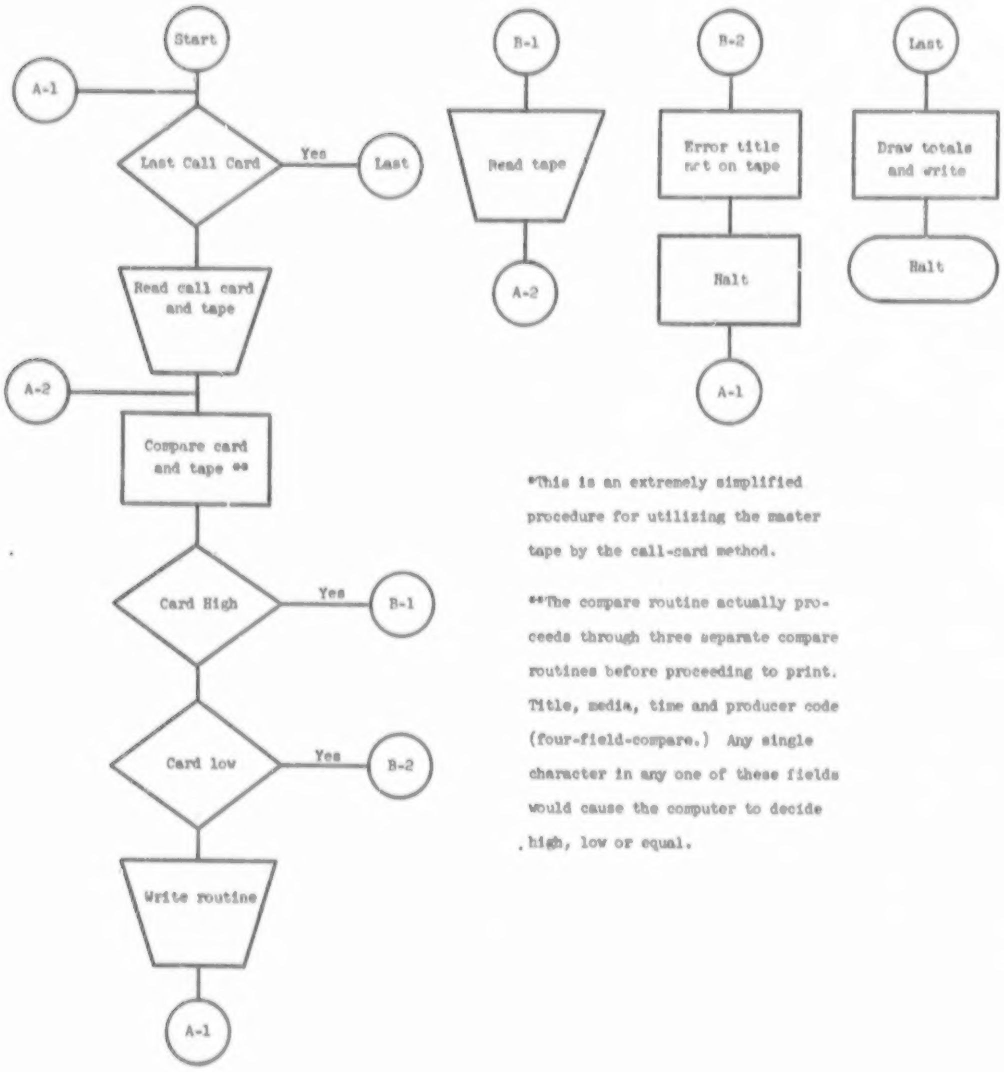
*This is an extremely simplified flow chart of the upgrading operation.

**Determine type of card. (Must be an "A", or title card.)

***The compare routine actually proceeds through three separate compare routines before proceeding to print: Title, media, time and producer code (four-field-compare.) Any single character in any one of these fields would cause the computer to decide high, low or equal.

****At this point, the computer checks for the type of card, whether an add, delete or change is required. Special routines are required for each.

FLOW CHART OF PRINT PROCEDURE*


Start
A-1
Last Call Card
Yes
Last
Read call card and tape
A-2
Compare card and tape **
Card High
Yes
B-1
Card low
Yes
B-2
Write routine
A-1
B-1
Read tape
A-2
B-2
Error title not on tape
Halt
A-1
Last
Draw totals and write
Halt

*This is an extremely simplified procedure for utilizing the master tape by the call-card method.

**The compare routine actually proceeds through three separate compare routines before proceeding to print. Title, media, time and producer code (four-field-compare.) Any single character in any one of these fields would cause the computer to decide high, low or equal.

ALPHABETICAL LISTING

A

A TRAVERS PARIS
20 MIN
RENTAL 6.50
A FRENCH LANGUAGE FILM. A TOUR OF PARIS, DISCUSSING ITS SIGHTS AND HISTORY. SEVERAL OF THE PICTURED SIGHTS INCLUDE LA PLACE DE L'ETOILE, LE TOUR EIFFEL, LOUVRE, QUARTIER LATIN, SORBONNE UNIVERSITY AND THE CATHEDRAL OF NOTRE-DAME. CONCLUDES BY PICTURING THE 1944 PARIS LIBERATION CELEBRATIONS.
FROM THE ICI LA FRANCE SERIES.
EVERYDAY ASPECTS OF FRENCH CULTURAL LIFE
PROD-ATV DIST-MGHT 1964

ABACUS
11 MIN
COLOR RENTAL 6.00
SHOWS HOW TO USE THE OPEN-END ABACUS. DISCUSSES THE HISTORY OF THE DECIMAL NUMBER SYSTEM AND PRINCIPLES OF ITS USE, SUCH AS GROUPING IN ADDITION, REGROUPING IN SUBTRACTION AND COMPARISON OF NUMBER VALUES.
PROD-AVIS DIST-AVIS 1958

ABC OF G, THE
23 MIN
COLOR RENTAL 8.00
EXPLAINS THE EFFECT PRODUCED BY ACCELERATIVE FORCE UPON THE BLOOD. SHOWS TESTING EQUIPMENT USED TO DETERMINE HOW SOON THE SUBJECT GREYS, BLACKS AND REDS OUT. STRESSES KEEPING THE BODY IN GOOD PHYSICAL CONDITION.
PROD-USN DIST-DUART 1948

ABC OF PUPPET MAKING - TYPE ONE PUPPETS - THOSE EASIEST TO MAKE
10 MIN
COLOR RENTAL 6.00
REVISED EDITION OF ''ABC OF PUPPETS, TYPE 1.'' DEMONSTRATES PROCEDURES IN MAKING AND DRESSING A STRINGLESS HAND PUPPET. SHOWS HOW MATERIALS, SUCH AS GLUE AND THREAD, MAY BE USED SIMPLY AND EFFECTIVELY. TECHNIQUES IN DRAWING THE FEATURES AND MAKING THE COSTUMES ARE ILLUSTRATED.
PROD-BAILEY DIST-BAILEY 1954

ABC OF PUPPET MAKING - TYPE TWO PUPPETS - THOSE WITH BUILT-UP FEATURES
10 MIN
COLOR RENTAL 6.00
REVISED EDITION OF ''ABC OF PUPPETS, TYPE 2.'' SHOWS HOW TO MAKE A PUPPET HEAD WITH BUILT-UP FEATURES THROUGH THE USE OF PICTURE WIRE AND PAPIER-MACHE, AND HOW TO HOLD AND MANIPULATE A PUPPET SKILLFULLY. EXPLAINS THE PRODUCTION OF A PUPPET PLAY.
PROD-BAILEY DIST-BAILEY 1954

ABOUT THE HUMAN BODY
15 MIN
COLOR RENTAL 7.00
A YOUNG BOY VISITING HIS DOCTOR IS TOLD ABOUT THE NERVOUS, RESPIRATORY, DIGESTIVE AND CIRCULATORY SYSTEMS OF HIS BODY. HE ALSO LEARNS THE FUNCTION OF BONES, LIGAMENTS AND MUSCLES. ANIMATION IS USED.
FROM THE HEATH SCIENCE FILMS SERIES.
PROD-CF DIST-CF

ABOVE THE TIMBERLINE - THE ALPINE TUNDRA ZONE
16 MIN
COLOR RENTAL 7.00
DESCRIBES THE CLIMATIC CONDITIONS OF THE ALPINE TUNDRA VEGETATION BELT AND EXAMINES THE HARDY PLANT AND ANIMAL LIFE THAT CAN SURVIVE THE RIGORS OF HIGH ALTITUDES AND EXTREME TEMPERATURES.
PROD-NFBC DIST-MGHT 1960

ACCORDING TO PLAN
9 MIN
RENTAL 4.00
INTRODUCES ENGINEERING DRAWING AND ATTEMPTS TO PROMOTE STUDENT INTEREST IN THE FIELD.
FROM THE ENGINEERING DRAWING SERIES.
PROD-MGHT DIST-MGHT 1947

ADAPTATIONS OF INSECTS
13 MIN
COLOR RENTAL 6.00
DISCUSSES ENVIRONMENTAL ADAPTATIONS OF ANIMALS AS EXHIBITED IN INSECTS. TYPES OF ADAPTATIONS EXPLAINED INCLUDE MIMICRY, AND STRUCTURAL, NUMERICAL AND SEASONAL ADAPTATION. USES CLOSE-UPS AND MACROPHOTOGRAPHY TO SHOW BODY PARTS OF INSECTS.
PROD-STANF DIST-STANF 1962

ADAPTING TO CHANGES IN NATURE
10 MIN
COLOR RENTAL 6.00
DEMONSTRATES SOME FAMILIAR, AS WELL AS SOME UNUSUAL, WAYS IN WHICH LIVING THINGS ADAPT TO ENVIRONMENTAL CHANGES IN ORDER TO SURVIVE.
PROD-JOU DIST-JOU

ADAPTIVE RADIATION - THE MOLLUSKS
18 MIN
COLOR RENTAL 7.00
LIVE PHOTOGRAPHY OF MANY SPECIES OF MOLLUSKS SHOWS THE WAYS IN WHICH MOLLUSKS ARE ADAPTED TO SPECIALIZED AND DIFFERENT WAYS OF LIFE.
FROM THE BIOLOGY SERIES. UNIT 3, ANIMAL LIFE
PROD-EBF DIST-EBF 1962

ADDING AND SUBTRACTING
11 MIN
COLOR RENTAL 6.00
PRESENTS SIMPLE NUMBER STORIES USING LEAVES, MARBLES, APPLES, COINS, TOY BOATS, WHITE MICE AND DUCKS. EMPHASIZES HOW THE NUMBERS CHANGE WITH THE ACTION OF THE STORY AND ILLUSTRATES THE CORRESPONDING ARITHMETIC PROBLEM IN ADDITION OR SUBTRACTION.
PROD-JHP DIST-JHP 1955

ADDING FRACTIONS
20 MIN
COLOR RENTAL 8.00
DEMONSTRATES THE CONCEPT OF COMBINING LIKE THINGS, AS RELATED TO THE ADDITION OF FRACTIONS. ILLUSTRATES SITUATIONS WHERE THE ADDITION OF FRACTIONS IS USED.
FROM THE BUILDING CONCEPTS IN MATHEMATICS SERIES.
PROD-COLBRN DIST-COLBRN 1962

ADDITION OF WHOLE NUMBERS
29 MIN
COLOR RENTAL 8.50
EXPLAINS WHY AN UNDERSTANDING OF THE CONCEPTS OF SET UNION, COUNTING, CARDINAL NUMBER, ORDERED PAIR AND DISJOINT SETS IS IMPORTANT IN LEARNING TO ADD.
FROM THE GREATER CLEVELAND MATHEMATICS SERIES. NO. 3
PROD-SRA DIST-SRA

ADELIE PENGUINS OF THE ANTARCTIC (REV ED)
23 MIN
COLOR RENTAL 8.00
RECORDS THE LIFE CYCLE OF THE ADELIE PENGUIN, INCLUDING COURTSHIP, NESTING BEHAVIOR AND THE REARING OF CHICKS. ALSO PICTURES THE BIRDS TOBOGGANING OVER ICE.
PROD-NYZS DIST-SF 1965

ADMINISTERING A TESTING PROGRAM - SIX STEPS IN THE RIGHT DIRECTION
13 MIN
RENTAL 5.00
DISCUSSES SIX TESTING POINTS - PLANNING THE PROGRAM, HANDLING THE MATERIALS, TRAINING EXAMINERS, PREPARING STUDENTS, ADMINISTERING THE TEST AND SCORING.
PROD-ETS DIST-ETS PRODN-ONFILM

ADMINISTERING THE KUHLMANN-ANDERSON TEST
17 MIN
RENTAL 5.50
DEMONSTRATES HOW TO ADMINISTER THE KUHLMAN-ANDERSON TEST ''B'' WITH A STANDARDIZED FRAMEWORK. THE EXAMINER PROVIDES DETAILED DIRECTIONS FOR THE TEST.
PROD-LACS DIST-BAILEY 1960

ADMIRAL BYRD
26 MIN
RENTAL 7.50
USES RARE ACTUALITY FOOTAGE TO PORTRAY THE PERSONAL LIFE AND HISTORY-MAKING DEEDS OF ADMIRAL BYRD.

FROM THE BIOGRAPHY SERIES.
PROD-WOLPER DIST-SF 1965

ADMIRAL HALSEY 26 MIN
RENTAL 7.50
USES RARE ACTUALITY FOOTAGE TO PORTRAY THE PERSONAL LIFE AND HISTORY-MAKING DEEDS OF ADMIRAL HALSEY.
FROM THE BIOGRAPHY SERIES.
PROD-WOLPER DIST-SF 1965

ADMIRAL NIMITZ 26 MIN
RENTAL 7.50
USES RARE ACTUALITY FOOTAGE TO PORTRAY THE PERSONAL LIFE AND HISTORY-MAKING DEEDS OF ADMIRAL NIMITZ.
FROM THE BIOGRAPHY SERIES.
PROD-WOLPER DIST-SF 1965

ADOLESCENT YEARS, THE 27 MIN
RENTAL 7.50
HIGHLIGHTS THE ACTIVITIES OF TODAY'S YOUTH AND THEIR SEARCH FOR IDENTITY. SHOWS ASPECTS OF THEIR RACE FOR ACCEPTANCE, SUCH AS DRESS, POLITICS, WORK AND PLAY.
PROD-ABCTV DIST-USC 1965

ADVANCED TYPING - DUPLICATING AND MANUSCRIPT 26 MIN
RENTAL 7.50
DEMONSTRATES THE PROPER METHOD OF MAKING MASTERS FOR DUPLICATING MACHINE USE.
PROD-USN DIST-DUART PRODN-DEFREN 1943

ADVENTURES OF A CHIPMUNK FAMILY 11 MIN
COLOR RENTAL 6.00
SHOWS NEWBORN CHIPMUNK BABIES AND THEIR TRAINING DURING THE EARLY SUMMER. INCLUDES THE CHIPMUNK DIGGING A BURROW, COLLECTING A STORE OF FOOD AND SETTLING DOWN FOR THE LONG WINTER REST.
PROD-EBF DIST-EBF 1958

AFRICA AWAKENS - MODERN NIGERIA 21 MIN
COLOR RENTAL 8.00
PRESENTS AN INSIGHT INTO AFRICA THROUGH A STUDY OF NIGERIA, THE MOST POPULATED COUNTRY ON THE CONTINENT. STRESSES THE INFLUENCES OF CLIMATE AND GEOGRAPHY ON THE ECONOMY, URBANIZATION AND EDUCATION.
PROD-ATLAP DIST-ATLAP PRODN-HAGOPN 1961

AFRICA IS MY HOME 22 MIN
COLOR RENTAL 8.00
USES THE STORY OF A WEST AFRICAN WOMAN TO EXPLORE THE PROBLEMS OF THE EMERGING NATIONS. DESCRIBES THE CONFLICT BETWEEN ISLAMIC AND CHRISTIAN CULTURES, TRADITION AND PROGRESS, AND INDEPENDENCE AND COLONIALISM. DISCUSSES THE PROBLEMS OF ECONOMIC RECONSTRUCTION.
PROD-ATLAP DIST-ATLAP PRODN-HAGOPN 1960

AFRICAN GIRL - MALOBI 11 MIN
COLOR RENTAL 6.00
SHOWS LIFE IN A NATIVE VILLAGE, WORK OF THE PARENTS, MARKETING, REBUILDING MUD HOUSES AND OTHER ACTIVITIES. A YOUNG GIRL TELLS HOW HER LIFE IS CHANGING AND OF HER YEARNING FOR AN EDUCATION.
PROD-ATLAP DIST-ATLAP PRODN-HAGOPN 1960

AFTERMATH OF WORLD WAR I 27 MIN
RENTAL 7.50
DISCUSSES MAJOR CONSEQUENCES OF WORLD WAR I, SUCH AS POLITICAL INSTABILITY, INTENSIFIED NATIONAL RIVALRY, ECONOMIC DISABILITY AND SOCIAL UNREST. COVERS ALL THE MAJOR COUNTRIES INVOLVED.
PROD-CBSTV DIST-MGHT 1966

AFTERMATH OF WORLD WAR II - PROLOGUE TO THE COLD WAR 25 MIN
RENTAL 7.50
SUMMARIZES THE MAJOR RESULTS OF WORLD WAR II AND PRESENTS THE DEVELOPMENTS THAT SET THE STAGE FOR THE BREAKUP OF THE VICTORIOUS ALLIES INTO TWO OPPOSING GROUPS. USING MAPS, CHARTS, AND AUTHENTIC FOOTAGE OF THE PERIOD, THE FILM IS DESIGNED TO CREATE AN UNDERSTANDING OF THE BACKGROUND EVENTS LEADING TO THE IDEOLOGICAL CONFLICT KNOWN AS THE COLD WAR.
PROD-KAP DIST-MGHT 1962

AGE OF SPECIALIZATION 13 MIN
RENTAL 5.00
DISCUSSES TECHNOLOGICAL CHANGES AND THE NEED FOR SPECIALIZATION. CONTRASTS THE WORK AND ACTIVITIES OF A FARMER, SHOEMAKER, STOREOWNER AND COUNTRY DOCTOR IN 1900 WITH THOSE OF MODERN SPECIALISTS.
FROM THE SOCIOLOGY SERIES.
PROD-MGHT DIST-MGHT PRODN-KNI 1957

AGE OF TURMOIL 20 MIN
RENTAL 6.50
ILLUSTRATES THE BEHAVIOR THAT REFLECTS THE EMOTIONAL TURMOIL OF THE EARLY TEEN-AGER--GIGGLING, DESTRUCTIVE CRITICISM OF SCHOOL AND UNREALISTIC IDEAS OF HIS OWN FUTURE.
FROM THE ADOLESCENT DEVELOPMENT SERIES.
PROD-MGHT DIST-MGHT PRODN-CRAF 1952

AID TO FAMILIES WITH DEPENDENT CHILDREN INTAKE INTERVIEW - TEAL - JUSTIN 72 MIN
SALE 295.00 (SET) 75.00 (EACH) - RENTAL 20.00 (SET)

CONSISTS OF FOUR STUDIES SUPPLIED ON FOUR REELS EACH ABOUT 18 MINUTES IN LENGTH. SEE SERIES TITLE FOR FURTHER DESCRIPTION.
FROM THE STUDIES IN INTERVIEWING SERIES.
PROD-USC DIST-USC 1965

AIR ALL AROUND US 10 MIN
RENTAL 5.00
USES CLASSROOM DEMONSTRATIONS AND EVERYDAY PROBLEMS TO EXPLAIN CONTRACTION AND EXPANSION OF AIR, COMPRESSED AIR AND THE CONCEPT THAT AIR HAS WEIGHT.
FROM THE ELEMENTARY SCIENCE SERIES.
PROD-YAF DIST-MGHT 1948

AIR AND WHAT IT DOES 11 MIN
COLOR RENTAL 6.00
REAL-LIFE SITUATIONS GIVE CHILDREN AN OPPORTUNITY TO DISCOVER BASIC CONCEPTS ABOUT AIR. THEY LEARN WHY IT IS ESSENTIAL TO LIVING THINGS AND HOW IT MOVES, EXPANDS, CONTRACTS AND EXERTS PRESSURE.
PROD-EBF DIST-EBF 1962

AIR AROUND US, THE 12 MIN
COLOR RENTAL 6.00
USES LIVE ACTION AND ANIMATION TO POINT OUT THE VARIOUS ATTRIBUTES OF AIR AND TO SHOW HOW AIR INFLUENCES LIFE ON EARTH.
FROM THE DISCOVERING OUR EARTH SERIES.
PROD-CENCO DIST-CENCO 1963

AIR MASSES AND FRONTS 26 MIN
RENTAL 7.50
DESCRIBES THE TROPOSPHERE, THE FORMATION OF CLOUDS, WARM AND COLD FRONTS AND CYCLONES, AND EXPLAINS THE CONDITIONS RESPONSIBLE FOR DIFFERENT KINDS OF WEATHER.
FROM THE AEROLOGY SERIES.
PROD-USN DIST-USN

AIRFREIGHT 14 MIN
RENTAL 5.00
DEMONSTRATES HOW AIR FREIGHT IS UNLOADED FROM A TRUCK, HOW IT IS WEIGHED AND PROCESSED AND HOW IT IS LIFTED INTO A CARGO PLANE. DESCRIBES HOW THE CARGO PLANE IS PREPARED FOR TAKE-OFF.
PROD-ACA DIST-ACA 1952

AIRPLANE TRIP 11 MIN
COLOR RENTAL 6.00
REVISED EDITION OF ''AN AIRPLANE TRIP.'' JOAN AND JUDY AND THEIR PET DOG FLY FROM CHICAGO TO SAN FRANCISCO TO JOIN THEIR PARENTS. THEY LEARN ABOUT VARIOUS WORKMAN AT THE AIRPORT, AND ABOUT LOADING BAGGAGE AND PETS ON A PLANE.
PROD-EBF DIST-EBF 1955

AIRPLANE TRIP BY JET, AN 11 MIN

SUBJECT MATTER LISTING

AGRICULTURE

ATOMIC AGE FARMER, THE
BIG HARVEST - THE STORY OF AGRICULTURE
CONSERVATION OF NATURAL RESOURCES
CARE OF PETS (2ND ED)
CORN FARMER, THE (2ND ED)
DAIRY - FARM TO DOOR
EARTHWORMS
EGGS
EGGS TO CHICKENS
FARM ANIMALS (2ND ED)
FARMER OF AUSTRIA
FARMER, THE
FARMER, THE - FEAST OR FAMINE
FRUITS OF PLANTS, THE
HARVEST OF SHAME
HARVESTERS, THE
HERDS WEST
IMPROVING STRAINS OF LIVESTOCK - APPLICATIONS OF GENETIC PRINCIPLES
LAND, THE
MAP OF CALIFORNIA - AGRICULTURAL USES OF LOWLANDS IN COASTAL VALLEYS
MAP OF CALIFORNIA - HIGHLANDS AND THEIR USES
MAP OF CALIFORNIA - THE CENTRAL VALLEY AND HOW MAN USES THE LAND FOR AGRICULTURE
MAP OF CALIFORNIA - THE DESERT AND HOW MAN USES DESERT VALLEYS FOR AGRICULTURE
MILLING MACHINE
NEW WAYS IN FARMING
POULTRY ON THE FARM (2ND ED)
RADIATION - SILENT SERVANT OF MANKIND
RICE
RICE, AMERICA'S FOOD FOR THE WORLD
SHEEP AND SHEPHERDS
STORY OF CALIFORNIA AGRICULTURE, THE
TRUCK FARM TO STORE
VOCATIONS IN AGRICULTURE
WHEAT - FROM FARM TO CONSUMER
WHEAT COUNTRY
WHEAT FARMER, THE (2ND ED)
WHEAT RUST
WHOLESALE PRODUCE MARKET, PT 1

ANTHROPOLOGY

ARCHAEOLOGY

DANGEROUS RIVER
JOURNEY INTO TIME, A

CULTURAL ANTHROPOLOGY

ANCIENT NEW WORLD, THE
BEAR AND THE HUNTER, THE
ESKIMO FAMILY
ESKIMO IN LIFE AND LEGEND - THE LIVING STONE
ESKIMOS - FOOD AND CLOTHING
ESKIMOS - SHELTER
ESKIMOS - SURVIVAL
FOUR FAMILIES, PT 1
FOUR FAMILIES, PT 2
GREAT AMERICAN FUNERAL, THE
HAWAIIAN NATIVE LIFE
INDIANS - BOYS AND GIRLS
INDIANS - HOW THEY LIVED
INDIANS - HUNTING
INDIANS - STORIES AND LEGENDS
LAND OF IMMIGRANTS
LAPLANDERS
MAN AND HIS CULTURE
MARCO POLO'S TRAVELS
MAYA OF ANCIENT AND MODERN YUCATAN
NATIVES OF GUATEMALA
NAVAJO CANYON COUNTRY
PEOPLE OF THE CONGO, A - THE MANGBETU
PRIMITIVE MAN IN OUR WORLD
PROBLEMS OF THE MIDDLE EAST
PYGMIES OF AFRICA
QUETZALCOATL
SHELTER (2ND ED)
SO THAT MEN ARE FREE
SPIRIT OF THE WHITE MOUNTAINS
THREE APPRENTICES, THE
THREE GRANDMOTHERS, THE
WEAVERS OF THE WEST
WHY DO WE STILL HAVE MOUNTAINS

ARTS - PERFORMING

DANCE

BUILDING CHILDREN'S PERSONALITIES WITH CREATIVE DANCING
DAINIC NATYA - DAILY DANCE
HOW TO WALTZ
MODERN DANCE - THE ABC OF COMPOSITION
MODERN DANCE TECHNIQUE IN SEQUENTIAL FORM
SMOKI SNAKE DANCE
TRAIL RIDE
WORLD OF DANCE, THE

DRAMA

AGE OF SOPHOCLES, THE
BEAUMARCHAIS ET SON SIECLE
PICKWICK PAPERS
CHARLES DICKENS CHRISTMAS, A - FROM THE
CHAUCER'S ENGLAND - WITH A SPECIAL PRESENTATION OF THE PARDONER'S TALE
HAMLET - THE AGE OF ELIZABETH
HUMANITIES,THE, LESSON 2, THE THEATER - ONE OF THE HUMANITIES
HUMANITIES, THE, LESSON 3, OUR TOWN AND OUR UNIVERSE
HUMANITIES, THE, LESSON 4, OUR TOWN AND OURSELVES
MACBETH
MACBETH, LESSON 1, THE POLITICS OF POWER
MACBETH, LESSON 2, THEMES OF MACBETH
MACBETH, LESSON 3, THE SECRET'EST MAN
OEDIPUS REX, LESSON 1, THE AGE OF SOPHOCLES
OEDIPUS REX, LESSON 2, THE CHARACTER OF OEDIPUS
OEDIPUS REX, LESSON 3, MAN AND GOD
ORPHEUS AND EURYDICE
SEAN O'CASEY
SHAKESPEARE - SELECTION FOR CHILDREN
UNE JOURNEE A LA COMEDIE-FRANCAISE

MUSIC - PRINCIPLES AND INSTRUMENTS

AUTOHARP, THE
B FLAT CLARINET, THE - THE CARE AND ASSEMBLY OF THE B FLAT CLARINET
BRASS CHOIR, THE (2ND ED)
CONDUCTING GOOD MUSIC
ELEMENTS OF COMPOSITION
HARMONY IN MUSIC
INTRODUCING THE BRASSES
INTRODUCING THE WOODWINDS
IT'S FUN TO SING
JOSE ITURBI, PROGRAM 2
MILDRED DILLING
MUSIC EDUCATION WORKSHOP, A
MUSIC IN THE WIND
PERCUSSION - THE PULSE OF MUSIC
PERCUSSION GROUP, THE (2ND ED)
PITCH PIPE, THE
PLAYING GOOD MUSIC - THE STRING QUARTET
SCIENCE OF MUSICAL SOUNDS, THE

STRING CHOIR, THE (2ND ED)
SYMPHONY ORCHESTRA, THE (2ND ED)
WHAT DOES MUSIC MEAN
WHAT IS A MELODY
WOODWIND CHOIR, THE (2ND ED)

MUSICAL ARRANGEMENTS

BALLAD OF IDYLLWILD, THE
BLUE DANUBE, THE
CARMEN
CONCERT MINIATURE NO. 1 - CHOPIN
CONCERT MINIATURE NO. 2 - SCHUBERT
COOLIDGE QUARTET
EMANUEL FEUERMANN
ENGULFED CATHEDRAL
FIFTH SYMPHONY IN C MINOR - 1ST MOVEMENT
FINGAL'S CAVE
FINLANDIA
GEYSER MELODIES
GILBERT AND SULLIVAN - THE SENSE AND NONSENSE OF A TOPSY-TURVEY WORLD
IGOR GORIN
JAZZ AGE, THE - 1919-1929
LANGUAGE OF THE MUTE SWAN
LIEBESTRAUM AND CLAIRE DE LUNE
LISTEN...AND SING
LISTENING TO GOOD MUSIC - THE STRING QUARTET
LUDWIG VON BEETHOVEN - WHO RISES ABOVE THEIR FELLOW MAN
MOMENTS IN MUSIC
MUSIC IN AMERICA
MUSIC FROM THE MOUNTAINS
SILENT NIGHT - STORY OF THE CHRISTMAS CAROL
TOCCATA AND FUGUE
TOCCATA FOR TOY TRAINS
TSCHAIKOWSKY CONCERT
TWO PART SINGING
VRONSKY AND BABIN, PROGRAM 1
VRONSKY AND BABIN, PROGRAM 2
WHAT IS A CONCERTO
WHAT IS A MELODY
WHAT MAKES MUSIC SYMPHONIC

ARTS - VISUAL

ARCHITECTURE

ARCHITECTURE WEST
ART AND ARCHITECTURE, LESSON 1, WHAT IS IT IT - WHY IS IT
ART AND ARCHITECTURE, LESSON 2, ART OF THE MIDDLE AGES
ART AND ARCHITECTURE, LESSON 3, CHARTRES CATHEDRAL
FORMS IN SPACE
FRANK LLOYD WRIGHT
PARALLEL LINES
WASHINGTON, D C - CAPITAL CITY U S A

CRAFTS

ABC OF PUPPET MAKING - TYPE ONE PUPPETS - THOSE THOSE EASIEST TO MAKE
ABC OF PUPPET MAKING - TYPE TWO PUPPETS - THOSE WITH BUILTUP FEATURES
ARTS AND CRAFTS OF MEXICO, PT 1 - POTTERY AND WEAVING
ARTS AND CRAFTS OF MEXICO, PT 2 - BASKETRY, STONE, WOOD AND METALS
ARTS AND CRAFTS OF NORWAY
BALLAD OF IDYLLWILD, THE
CARDBOARD MELODRAMA
CRAYON RESIST
DECORATING AND PLANNING YOUR HOME - SOME BASIC IDEAS
FABRICANTES MEXICANOS DE OLLAS
FINGER PAINTING TECHNIQUES
FOOD PREPARATION - SOME BASIC IDEAS
FROM LITTLE WINGS
GLASS
HOMESPUN
HOW TO MAKE A MASK
HOW TO MAKE A PUPPET
HOW TO MAKE A SIMPLE LOOM AND WEAVE
HOW TO MAKE A STARCH PAINTING
HOW TO MAKE AND USE A DIORAMA
HOW TO MAKE PAPIER MACHE ANIMALS
HOW TO WORK IN CLAY
JAPAN'S ART - FROM THE LAND
JEWELRY - BEADS
I, LEONARDO DA VINCI
MAKE A HOUSE MODEL
MAKE A MOBILE
MEXICAN VILLAGE COPPERMAKERS
POSTER MAKING - DESIGN AND TECHNIQUE
POSTER MAKING - PRINTING BY SILK SCREEN
SILK SCREEN TEXTILE PRINTING
TORN PAPER
WEAVERS OF THE WEST

ELEMENTS AND PRINCIPLES OF ART

ART AND ARCHITECTURE, LESSON 1, WHAT IS IT - WHY IS IT
ART AND ARCHITECTURE, LESSON 2, ART OF THE MIDDLE AGES
ART AND ARCHITECTURE, LESSON 3, CHARTRES CATHEDRAL
ART IN OUR WORLD
ART IN THE WESTERN WORLD - THE NATIONAL GALLERY OF ART, WASHINGTON D C
ART OF COLLECTING, THE
ARTIST AND NATURE
CARE OF ART MATERIALS
COLOR KEYING IN ART AND LIVING
COLORS ARE USEFUL
COMPOSITION IN PAINTING
CUBISM
DESIGN
DESIGN IN MOVEMENT - THE HAND IS MEANT TO FEEL
EXPRESSIONISM
GOTHIC ART
IMPRESSIONISM
PAINTING SHADOWS
REMBRANDT VAN RIJN - A SELF-PORTRAIT
RISE OF GREEK ART
SPACE
SURREALISM
THREE LITTLE WIZARDS - AN ADVENTURE IN COLOR
UNDERSTANDING COLOR - COLOR BY ADDITION

MOTION PICTURES - EXPERIMENTAL

AVALON
B E F, THE - BONUS EXPEDITIONARY FORCE
BORN AGAIN
BUG, THE
CHALLENGE, THE
CHILD'S INTRODUCTION TO THE COSMOS, A
CIRCLE, THE
DOMINATOR, THE
HOMAGE TO EADWEARD MUYBRIDGE
MAKE IT MOVE
OCCURRENCE AT OWL CREEK BRIDGE, AN
SNIPER, THE
THIS FILM HAS NO TITLE
STUDENT FILMS 1965-1966, PROGRAM 1
TROPE
TRUTH, JUSTICE AND THE AMERICAN WAY
UNTITLED
WILD FOWL IN SLOW MOTION

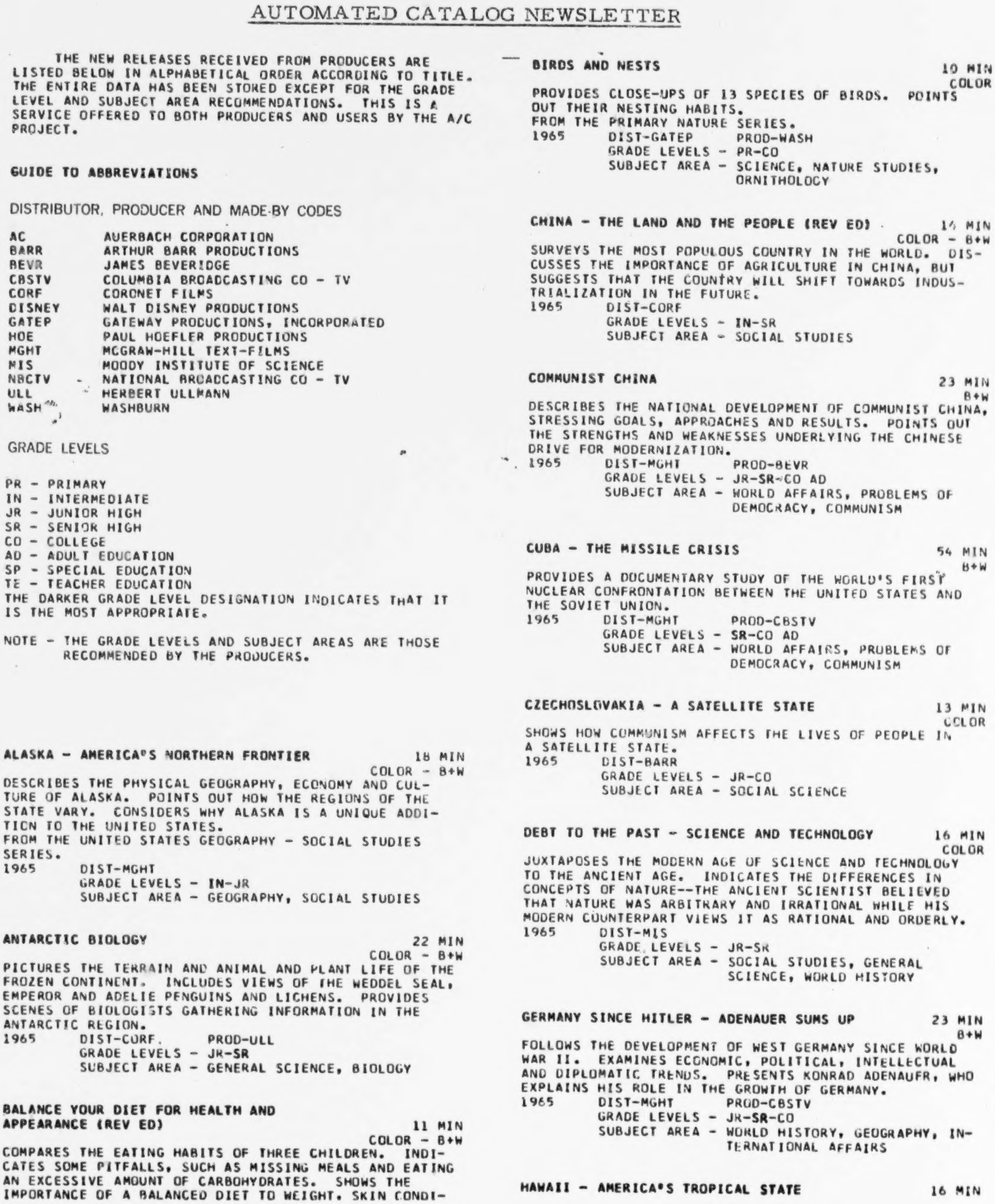
MOTION PICTURES AND PHOTOGRAPHY

ALCHEMIST IN HOLLYWOOD
ART DIRECTOR, THE
AVALON
BASIC PHOTOGRAPHY FOR ACCIDENT INVESTIGATION
BASIC PRINCIPLES OF FILM EDITING
BIOGRAPHY OF A MOTION PICTURE CAMERA, THE
BUG, THE
CHILD'S INTRODUCTION TO THE COSMOS, A
CINEMATOGRAPHER, THE
CIRCLE, THE
COSTUME DESIGNER, THE
CREATING CARTOONS
DOMINATOR, THE
DRAFTSMEN OF DREAMS

PRODUCERS' CODES

AAR	ASSN OF AMER RAILROADS
ABCTV	AMER BROADCASTING CO, TV
AC	AUERBACH CORP
ACA	ACADEMY FILMS
ACE	AMER CINEMA EDITORS, INC
ACOC	ARMSTRONG CORK CO
ADL	ANTI-DEFAMATION LEAGUE OF B-NAI B-RITH
AF	ASSN FILMS
AFF	AFFILIATED FILM PRODUCERS
AFFLMS	A F FILMS
AFLM	ASSN FILMS AND LOOK MAGAZINE
ALCOA	ALUMINUM CO OF AMERICA
ALLMOR	ALLEN-MOORE
AMB	AMBASSADOR FILMS
AMBERG	WILLIAM AMBERG
AMSDEN	CONSTANCE E AMSDEN
ANAIB	AUSTL NEWS AND INFORMATION BUREAU
ANDERS	WILLIAM A ANDERSON
ANDSON	ROBERT ANDERSON
APTA	AMER PHYS THERAPY ASSN
ARCO	ARCO FILMS
ARGO	ARGO FILMS INC
ARTHUR	GEORGE K ARTHUR - GO PICTURES
ARTS	ARTS AND AUDIENCES, INC
ATLAP	ATLANTIS PRODUCTIONS, INC
ATV	ASSOCIATED TV CO LTD
AUDIO	AUDIO PRODUCTIONS, INC
AVED	AV-ED FILMS
AVIS	AVIS FILMS
BACH	FRANK BACH
BACHRR	BACH - RANDALL
BAILEY	BAILEY FILMS, INC
BARWOC	HAL BARWOOD
BECK	LESTER BECK
BELL	BELL TELEPHONE CO
BEVR	JAMES BEVERIDGE
BFI	BRITISH FILM INSTITUTE
BIOF	BIOFILM
BIS	BRITISH INFORMATION SERV
BLA	GENE BLAKELY PRODUCTIONS
BMOI	BRITISH MINISTRY OF INFORMATION
BONNIE	BONNIE PICTURES
BOUWM	GEORGE BOUWMAN
BRADLY	RUTH BRADLEY
BREST	GEORGE BREST AND CO
BRO	ROBERT BROWN
BROUH	MARCEL BROUHON
BRYAN	JULIEN BRYAN
BTF	BRITISH TRANSPORT FILMS
BURN	PAUL BURNFORD
BYE	JUSTIN AND BYERS
CACC	CALIF CENTRAL COMMISSION
CAHILL	CHARLES CAHILL AND ASSOC, INC
CALVIN	CALVIN PRODUCTIONS
CARFI	CARAVEL FILMS, INC
CARLIL	FORBES CARLILE
CARRD	DOUG CARR
CBSTV	COLUMBIA BROADCASTING CO
CDOL	CANADIAN DEPT OF LABOR
CENCO	CENCO EDUCATIONAL FILMS
CENTRO	CENTRON CORP
CEP	CAMERA EYE PICTURES
CF	CHURCHILL FILMS
CFD	CLASSROOM FILM DISTRIBUTORS, INC
CHILDF	CHILDREN'S FILM FOUNDATION
CHRSTN	FRED CHRISTIAN
CIT	CALIF INSTITUTE OF TECHNOLOGY
CJCA	CALIF JR COLLEGE ASSN
CMC	CENTER FOR MASS COMMUNICATION OF COLUMBIA UNIV PRESS
COHEN	ROBERT COHEN
COLBRN	JOHN COLBURN ASSOC, INC
COLLRD	JARVIS COUILLARD ASSOC
CON	CONTEMPORARY FILMS
CONANT	THEODORE CONANT
CORF	CORONET FILMS
CPC	COLUMBIA PICTURE CORP
CRAF	CRAWLEY FILMS LTD
CULLEN	EDWARD F CULLEN
CW	CHURCHILL-WEXLER FILM PRODUCTION
CWCE	CENTRAL WASHINGTON COLLEGE OF EDUCATION
DAGP	AVALON DAGGETT PRODUCTIONS
DATA	DATA FILMS
DAVP	SID DAVIS PRODUCTIONS
DAWSON	LARRY DAWSON PRODUCTIONS
DEFREN	DE FRENES CO
DEROCH	LOUIS DE ROCHEMONT ASSOC
DF	DIMENSION FILMS
DISF	DISCOVERY FILMS
DISNEY	WALT DISNEY PRODUCTIONS
DOWP	PAT DOWLING PICTURES
DUART	DU ART FILM LABS, INC
DUNCAN	PHIL DUNCAN
EAMES	CHARLES AND RAY EAMES
EBF	ENCYCLOPAEDIA BRITANNICA FILMS
ECIS	EUROPEAN COMMUNITY INFORMATION SERV
EDVENT	ED-VENTURE FILMS
EFCA	EDUCATIONAL FILM CORP OF AMERICA
EFVA	EDUCATIONAL FOUNDATION FOR VISUAL AIDS
EH	EDUCATIONAL HORIZONS
ELJO	ELJO PRODUCTIONS
EMW	EMPLOYERS MUTUAL OF WAUSAU
ETP	ETIHANDA PRODUCTIONS
ETS	EDUCATIONAL TESTING SERV
EVA	GRANT EVANS
EVAN	MARIAN EVANS
EVANSA	ARTHUR EVANS
EWI	NORRIS EWING FILMS
FDF	FORD FOUNDATION
FINA	FINE ARTS PRODUCTIONS
FITZ	FITZPATRICK PICTURES
FOSTER	WALTER FOSTER ART FILMS
FRANK	LAWRENCE P FRANK JR
FRIS	MARGARETTA B FRISTOE
FRITH	FRITH FILMS
FRYE	FRYE-CIRLIN PRODUCTIONS
FURMAN	WILLIAM FURMAN
GANZ	WILLIAM J GANZ
GAYEK	JOSEPH GAYEK
GD	GENERAL DYNAMICS CORP
GE	GENERAL ELECTRIC
GGKA	GOLDEN GATE KINDERGARTEN ASSN
GJP	GROVER-JENNINGS PRODUCTIONS
GOLD	GARY GOLDSMITH
GRUBBS	HARRY GRUBBS
GUM	S WILLIAM GUMBINER
HA	BERT HAANSTRA
HAGOPN	J MICHAEL HAGOPIAN
HALAS	HALAS AND BATCHELOR
HAM	E E HAMMOND
HANDEL	HANDEL FILM CORP
HANDY	JAM HANDY ORGAN
HANSON	DAVID HANSON
HARL	WILLIAM M HARLOW
HARRY	RAY HARRYHAUSSEN
HAS	GUY D HASELTON
HAT	CHARLES HATHAWAY
HAZAM	LOUIS J HAZAM
HEF	HELEN HEFFERNAN
HH	HILTON HOTELS
HL	HAWLEY-LORD PRODUCTIONS
HOGE	EDISON HOGE
HOLMES	BURTON HOLMES
HORIZN	HORIZON FILMS
HP	HARTLEY PRODUCTIONS
HRAW	HOLT, RINEHART AND WINSTON
HYATT	DONALD HYATT
IFB	INTERNATIONAL FILM BUREAU
IFF	INTERNATIONAL FILM FOUNDATION
IH	INTERNATIONAL HARVESTER CO
INFORF	INFORMATION FILMS
INVINC	INVINCIBLE STUDIOS

IP	INFORMATION PRODUCTIONS
IQFILM	I Q FILMS
IU	IND UNIV
JANS	WERNER JANSSEN
JENSEN	JENSEN (HOWARD)
JHP	JOHNSON HUNT PRODUCTIONS
JM	J M PRODUCTIONS
JORHAL	JORHAL PRODUCTIONS
JOU	JOURNAL FILMS
KAHN	CARL KAHN
KAP	RICHARD KAPLAN PRODUCTIONS
KB	KNOWLEDGE BUILDERS
KNI	KNICKERBROCKER PRODUCTIONS
KNXT	KNXT, COLUMBIA BROADCASTING CO, TV
KORTY	JOHN KORTY
LACHD	L A COUNTY HEALTH DEPT
LACS	L A CITY SCHOOLS
LADWP	L A CITY DEPT OF WATER AND POWER
LANG	ROBERT LANG
LARK	ED LARK
LAWB	LAWBETTS PRODUCTIONS
LENOX	AUGUST LENOX
LES	IRVING LESSER ENTERPRISES
LEV	CAROL LEVENE
LEVO	EDWARD LEVONIAN
LNS	LOUCKS AND NORLING STUDIOS
LORNTZ	PARE LORENTZ
LOVE	JAMES LOVE
MACA	MATERNITY CENTER ASSN
MAHNKE	CARL F MAHNKE PRODUCTIONS
MCFH	MASS COUNCIL FOR HUMANTIES
MCMGP	MC MURRY-GOLD PRODUCTIONS
MERRTT	RUSSELL MERRITT
MGHT	MC GRAW-HILL TEXTFILMS
MGM	METRO-GOLDWYN-MAYER STUDIO
MHFB	MENTAL HEALTH FILM BOARD
MILLS	MILLS PICTURE CORP
MCMA	MUSEUM OF MODERN ART
MORLAT	MORELAND-LATCHFORD PRODUCTIONS
MORSE	MORSE PRODUCTIONS
MOT	MARCH OF TIME
MURPHY	DONALD MURPHY
MUS	MUSICOLOR INC
NAOS	NATL ACADEMY OF SCIENCES
NATLFS	NATL FILM STUDIOS
NBCTV	NATL BROADCASTING CO, TV
NCCJ	NATL CONFERENCE OF CHRISTIANS AND JEWS
NCF	NATL CONSERVATION FOUNDATION
NET	NATL EDUCATIONAL TV, INC
NFBC	NATL FILM BOARD OF CANADA
NIEB	RUBY NIEBAUER
NORWAY	NORWEGIAN GOVT
NP	NEUBACHER PRODUCTIONS
NVFP	NEUBACHER-VETTER FILM PRODUCTION
NWINS	NATIONWIDE INSURANCE
NYZS	N Y ZOOLOGICAL SOCIETY
ONFILM	ON FILM PRODUCTIONS, INC
OPRINT	OUT OF PRINT
PALM	W A PALMER PRODUCTIONS
PANWA	PAN AMER WORLD AIRWAYS
PARKER	HJORDIS KITTLE PARKER
PART	PARTHENON PICTURES
PATF	PATRICIAN FILMS
POTTER	ORCHARD AND PETRIE POTTER, INC
PPI	PARAMOUNT PICTURES, INC
PRECFI	PRECEDENT FILMS, INC
PURCEL	VIRGINIA PURCELL
PWA	PRATT AND WHITNEY AIRCRAFT
RAP	RADFORD PICTURES INC
REYP	STUART REYNOLD PRODUCTIONS
RICH	D L RICHARDSON
RKOP	RKO RADIO PICTURE-PATHE
ROCKE	ROCKEFELLER FOUNDATION
ROE	STUART ROE
ROMAGN	ROMAGNOLI
RR	REINO RANDALL
RTBL	ROUNDTABLE PRODUCTIONS
RUCKRT	PAUL RUCKERT
SALKIN	JERI SALKIN
SAUDEK	ROBERT SAUDEK, ASSOC, INC
SCHINL	JAMES SCHINNELLER
SCNDRI	JOHN SECONDARI
SF	STERLING EDUCATIONAL FILMS
SIXSS	SIX SCREEN SERV
SOLOW	SIDNEY SOLOW
SOUL	WALTER SOUL
SPRE	HILDEGARD L SPREEN
SQUIBB	E R SQUIBB AND SONS
SRA	SCIENCE RESEARCH ASSOC
STANF	STANTON FILMS
STAP	PHILIP STAPP
STOC	STANDARD OIL OF CALIF
SUC	ARNE SUCKSDORFF
SUDAN	REPUBLIC OF THE SUDAN
SUN	SUN DIAL FILMS, INC
SVEK	SVEKON FILMS
SVEN	AKTIEBOLAGET SVENSK FILM
SYRCU	SYRACUSE UNIV
TAC	TELEVISION AFFILIATES CORP
TEF	TEACHING FILMS
TENNEC	TENN EASTMAN CORP
TFC	TEACHING FILM CUSTODIANS
THIEB	WAYNE THIEBAUD
TNP	TRANS-NATL PRODUCTIONS
TRICKF	TRICKFILMS PRODUCTIONS
TRIPIX	TRI-PIX FILM SERV
TWCF	TWENTIETH CENTURY-FOX FILM
UCHI	UNIV OF CHICAGO
UCLA	UNIV OF CALIF (L A)
UIMPS	UNIV OF ILL MOTION PICTURE SERV
UIP	UNIVERSAL INTERNATIONAL PICTURES
UN	UNITED NATIONS
UNITED	UNITED FILMS
UPA	UNITED PRODUCTIONS OF AMERICA
USA	U S ARMY
USAF	U S AIR FORCE
USAID	U S DEPT OF STATE, AGENCY FOR INTERNATIONAL DEVELOPMENT
USC	UNIV OF SO CALIF
USDA	U S DEPT OF AGRICULTURE
USDS	U S DEPT OF STATE
USFS	U S DEPT OF AGRICULTURE FOREST SERV
USIA	U S INFORMATION AGENCY
USN	U S NAVY
USOCDM	U S OFFICE OF CIVIL DEFENSE MOBILIZATION
USOE	U S OFFICE OF EDUCATION
USOIAA	U S OFFICE OF INTER-AMER AFFAIRS
USOWI	U S OFFICE OF WAR INFORMATION
USPHS	U S PUBLIC HEALTH SERV
USVA	U S VETERANS ADMIN
USWD	U S WAR DEPT
UWF	UNITED WORLD FILMS, INC
VEF	VISUAL EDUCATION FILMS
VGF	VOCATIONAL GUIDANCE FILMS
VIK	VIKING FILMS PRODUCTIONS, INC
VIKING	VIKING FILMS
VISION	VISION ASSOCIATES
VYSTRC	FRANTISEK VYSTRCIL
WAD	JOHN WADDELL
WAT	WATERMAN PRODUCTIONS
WB	WARNER BROTHERS
WCLA	W COAST LUMBERMEN'S ASSN
WCTU	WOMEN'S CHRISTIAN TEMPERANCE UNION
WER	REINALD WERRENRATH
WHI	WHITTEN-APPLETON
WILDER	W LEE WILDER
WILSON	JOHN WILSON
WLFD	WORLD LAW FUND
WOITV	WOI TV PRODUCTIONS
WOLFF	RAPHAEL G WOLFF PRODUCTIONS
WOLPER	WOLPER PRODUCTIONS
WQED	WQED, EDUCATION TV STATION
WWP	WORLD WIDE PICTURES
WYLDE	WYLDE FILMS, INC
YAF	YOUNG AMER FILMS
YUP	YALE UNIV PRESS FILM SERV



AUTOMATED CATALOG NEWSLETTER

THE NEW RELEASES RECEIVED FROM PRODUCERS ARE LISTED BELOW IN ALPHABETICAL ORDER ACCORDING TO TITLE. THE ENTIRE DATA HAS BEEN STORED EXCEPT FOR THE GRADE LEVEL AND SUBJECT AREA RECOMMENDATIONS. THIS IS A SERVICE OFFERED TO BOTH PRODUCERS AND USERS BY THE A/C PROJECT.

GUIDE TO ABBREVIATIONS

DISTRIBUTOR, PRODUCER AND MADE-BY CODES

AC	AUERBACH CORPORATION
BARR	ARTHUR BARR PRODUCTIONS
BEVR	JAMES BEVERIDGE
CBSTV	COLUMBIA BROADCASTING CO - TV
CORF	CORONET FILMS
DISNEY	WALT DISNEY PRODUCTIONS
GATEP	GATEWAY PRODUCTIONS, INCORPORATED
HOE	PAUL HOEFLER PRODUCTIONS
MGHT	MCGRAW-HILL TEXT-FILMS
MIS	MOODY INSTITUTE OF SCIENCE
NBCTV	NATIONAL BROADCASTING CO - TV
ULL	HERBERT ULLMANN
WASH	WASHBURN

GRADE LEVELS

PR - PRIMARY
IN - INTERMEDIATE
JR - JUNIOR HIGH
SR - SENIOR HIGH
CO - COLLEGE
AD - ADULT EDUCATION
SP - SPECIAL EDUCATION
TE - TEACHER EDUCATION

THE DARKER GRADE LEVEL DESIGNATION INDICATES THAT IT IS THE MOST APPROPRIATE.

NOTE - THE GRADE LEVELS AND SUBJECT AREAS ARE THOSE RECOMMENDED BY THE PRODUCERS.

ALASKA - AMERICA'S NORTHERN FRONTIER 18 MIN
COLOR - B+W

DESCRIBES THE PHYSICAL GEOGRAPHY, ECONOMY AND CULTURE OF ALASKA. POINTS OUT HOW THE REGIONS OF THE STATE VARY. CONSIDERS WHY ALASKA IS A UNIQUE ADDITION TO THE UNITED STATES.
FROM THE UNITED STATES GEOGRAPHY - SOCIAL STUDIES SERIES.
1965 DIST-MGHT
GRADE LEVELS - **IN**-JR
SUBJECT AREA - GEOGRAPHY, SOCIAL STUDIES

ANTARCTIC BIOLOGY 22 MIN
COLOR - B+W

PICTURES THE TERRAIN AND ANIMAL AND PLANT LIFE OF THE FROZEN CONTINENT. INCLUDES VIEWS OF THE WEDDEL SEAL, EMPEROR AND ADELIE PENGUINS AND LICHENS. PROVIDES SCENES OF BIOLOGISTS GATHERING INFORMATION IN THE ANTARCTIC REGION.
1965 DIST-CORF PROD-ULL
GRADE LEVELS - JR-**SR**
SUBJECT AREA - GENERAL SCIENCE, BIOLOGY

BALANCE YOUR DIET FOR HEALTH AND APPEARANCE (REV ED) 11 MIN
COLOR - B+W

COMPARES THE EATING HABITS OF THREE CHILDREN. INDICATES SOME PITFALLS, SUCH AS MISSING MEALS AND EATING AN EXCESSIVE AMOUNT OF CARBOHYDRATES. SHOWS THE IMPORTANCE OF A BALANCED DIET TO WEIGHT, SKIN CONDI-

BIRDS AND NESTS 10 MIN
COLOR

PROVIDES CLOSE-UPS OF 13 SPECIES OF BIRDS. POINTS OUT THEIR NESTING HABITS.
FROM THE PRIMARY NATURE SERIES.
1965 DIST-GATEP PROD-WASH
GRADE LEVELS - PR-CO
SUBJECT AREA - SCIENCE, NATURE STUDIES, ORNITHOLOGY

CHINA - THE LAND AND THE PEOPLE (REV ED) 14 MIN
COLOR - B+W

SURVEYS THE MOST POPULOUS COUNTRY IN THE WORLD. DISCUSSES THE IMPORTANCE OF AGRICULTURE IN CHINA, BUT SUGGESTS THAT THE COUNTRY WILL SHIFT TOWARDS INDUSTRIALIZATION IN THE FUTURE.
1965 DIST-CORF
GRADE LEVELS - IN-SR
SUBJECT AREA - SOCIAL STUDIES

COMMUNIST CHINA 23 MIN
B+W

DESCRIBES THE NATIONAL DEVELOPMENT OF COMMUNIST CHINA, STRESSING GOALS, APPROACHES AND RESULTS. POINTS OUT THE STRENGTHS AND WEAKNESSES UNDERLYING THE CHINESE DRIVE FOR MODERNIZATION.
1965 DIST-MGHT PROD-BEVR
GRADE LEVELS - JR-SR-CO AD
SUBJECT AREA - WORLD AFFAIRS, PROBLEMS OF DEMOCRACY, COMMUNISM

CUBA - THE MISSILE CRISIS 54 MIN
B+W

PROVIDES A DOCUMENTARY STUDY OF THE WORLD'S FIRST NUCLEAR CONFRONTATION BETWEEN THE UNITED STATES AND THE SOVIET UNION.
1965 DIST-MGHT PROD-CBSTV
GRADE LEVELS - **SR**-CO AD
SUBJECT AREA - WORLD AFFAIRS, PROBLEMS OF DEMOCRACY, COMMUNISM

CZECHOSLOVAKIA - A SATELLITE STATE 13 MIN
COLOR

SHOWS HOW COMMUNISM AFFECTS THE LIVES OF PEOPLE IN A SATELLITE STATE.
1965 DIST-BARR
GRADE LEVELS - JR-CO
SUBJECT AREA - SOCIAL SCIENCE

DEBT TO THE PAST - SCIENCE AND TECHNOLOGY 16 MIN
COLOR

JUXTAPOSES THE MODERN AGE OF SCIENCE AND TECHNOLOGY TO THE ANCIENT AGE. INDICATES THE DIFFERENCES IN CONCEPTS OF NATURE--THE ANCIENT SCIENTIST BELIEVED THAT NATURE WAS ARBITRARY AND IRRATIONAL WHILE HIS MODERN COUNTERPART VIEWS IT AS RATIONAL AND ORDERLY.
1965 DIST-MIS
GRADE LEVELS - JR-SR
SUBJECT AREA - SOCIAL STUDIES, GENERAL SCIENCE, WORLD HISTORY

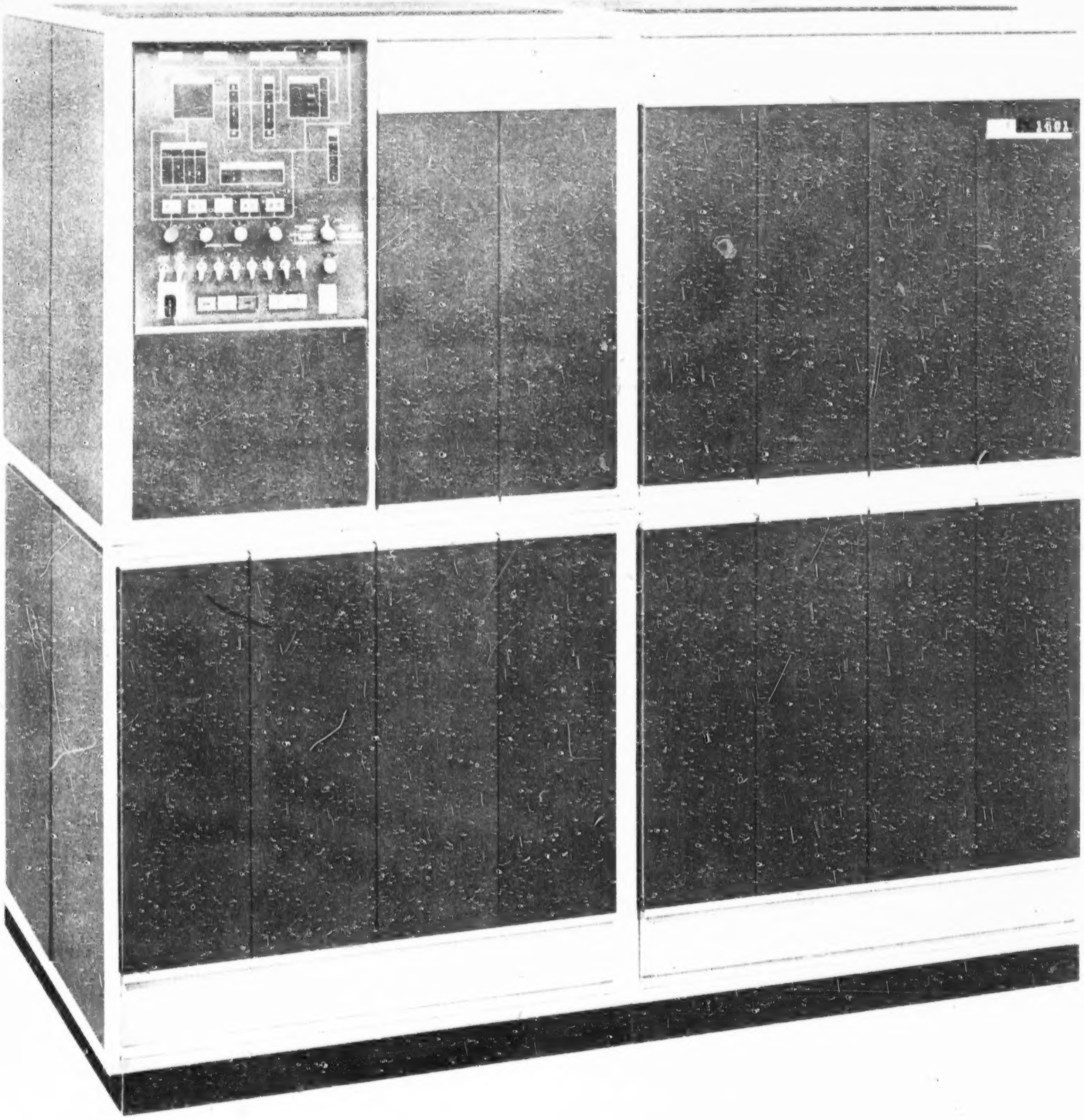
GERMANY SINCE HITLER - ADENAUER SUMS UP 23 MIN
B+W

FOLLOWS THE DEVELOPMENT OF WEST GERMANY SINCE WORLD WAR II. EXAMINES ECONOMIC, POLITICAL, INTELLECTUAL AND DIPLOMATIC TRENDS. PRESENTS KONRAD ADENAUER, WHO EXPLAINS HIS ROLE IN THE GROWTH OF GERMANY.
1965 DIST-MGHT PROD-CBSTV
GRADE LEVELS - JR-**SR**-CO
SUBJECT AREA - WORLD HISTORY, GEOGRAPHY, INTERNATIONAL AFFAIRS

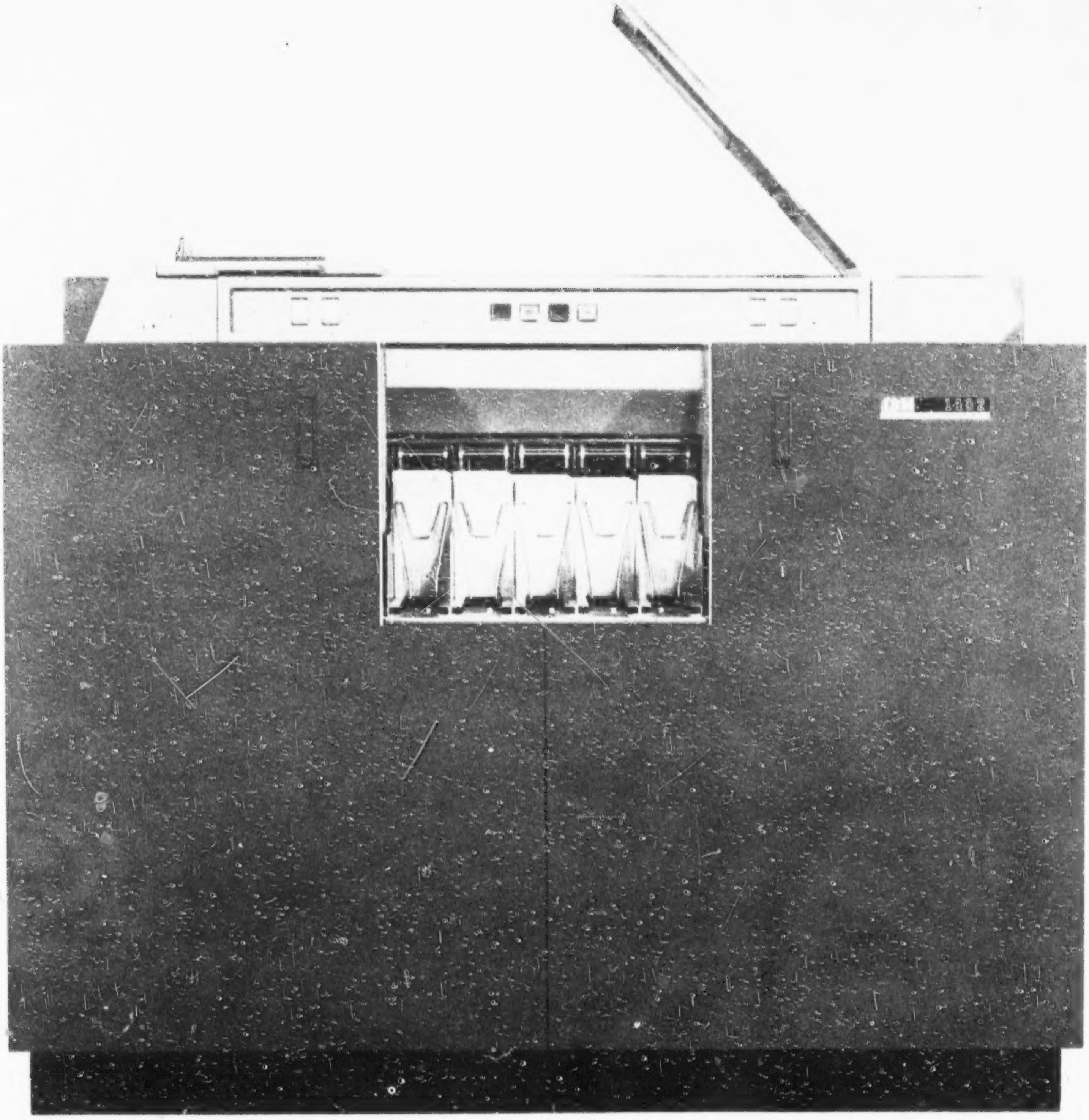
HAWAII - AMERICA'S TROPICAL STATE 16 MIN

NOTE: An actual reproduction of one page of the Automated Cataloging NEWSLETTER.

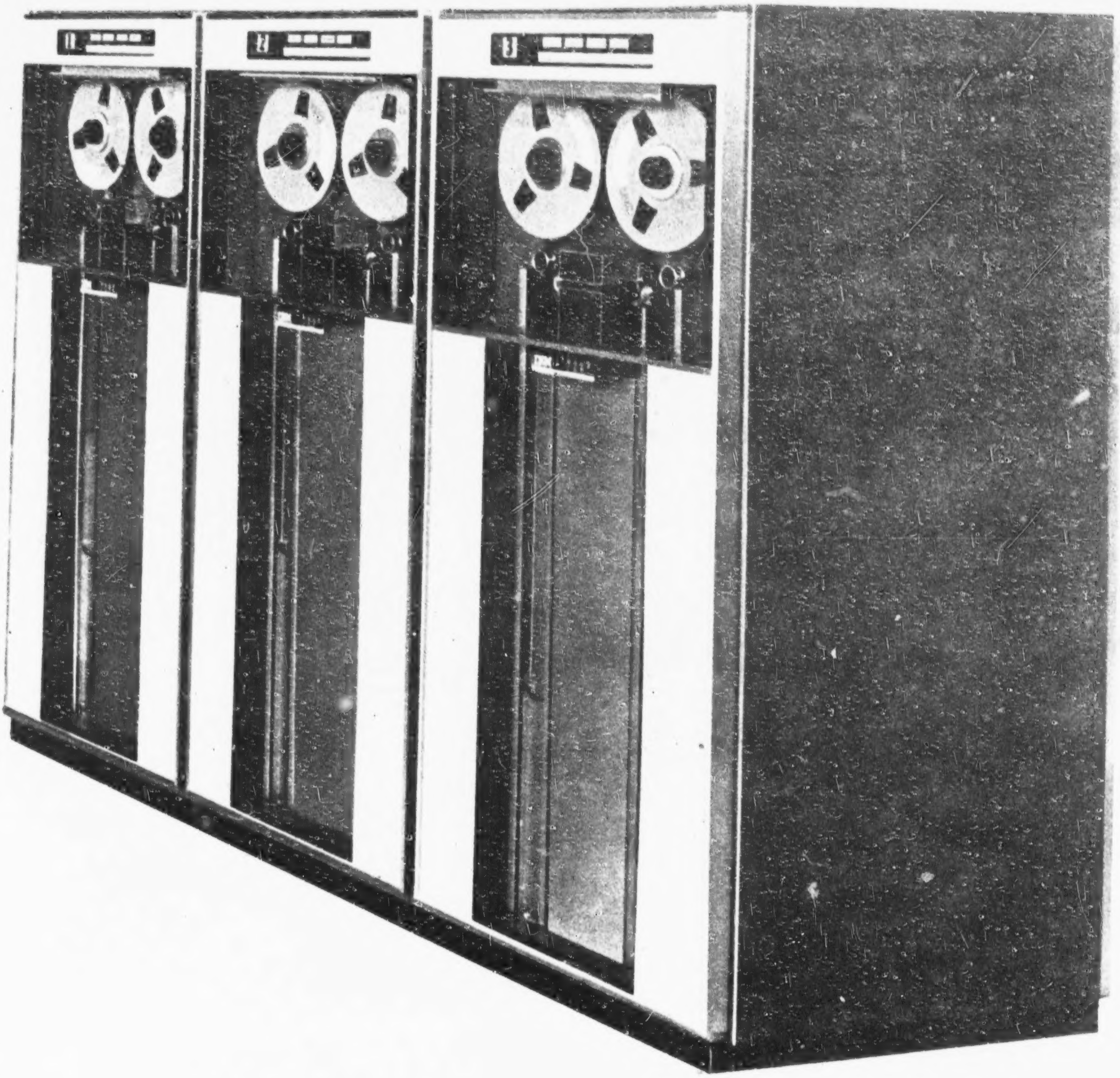
IBM 1401 PROCESSOR



IBM 1402 CARD-PUNCH



IBM 729 TAPE DRIVES



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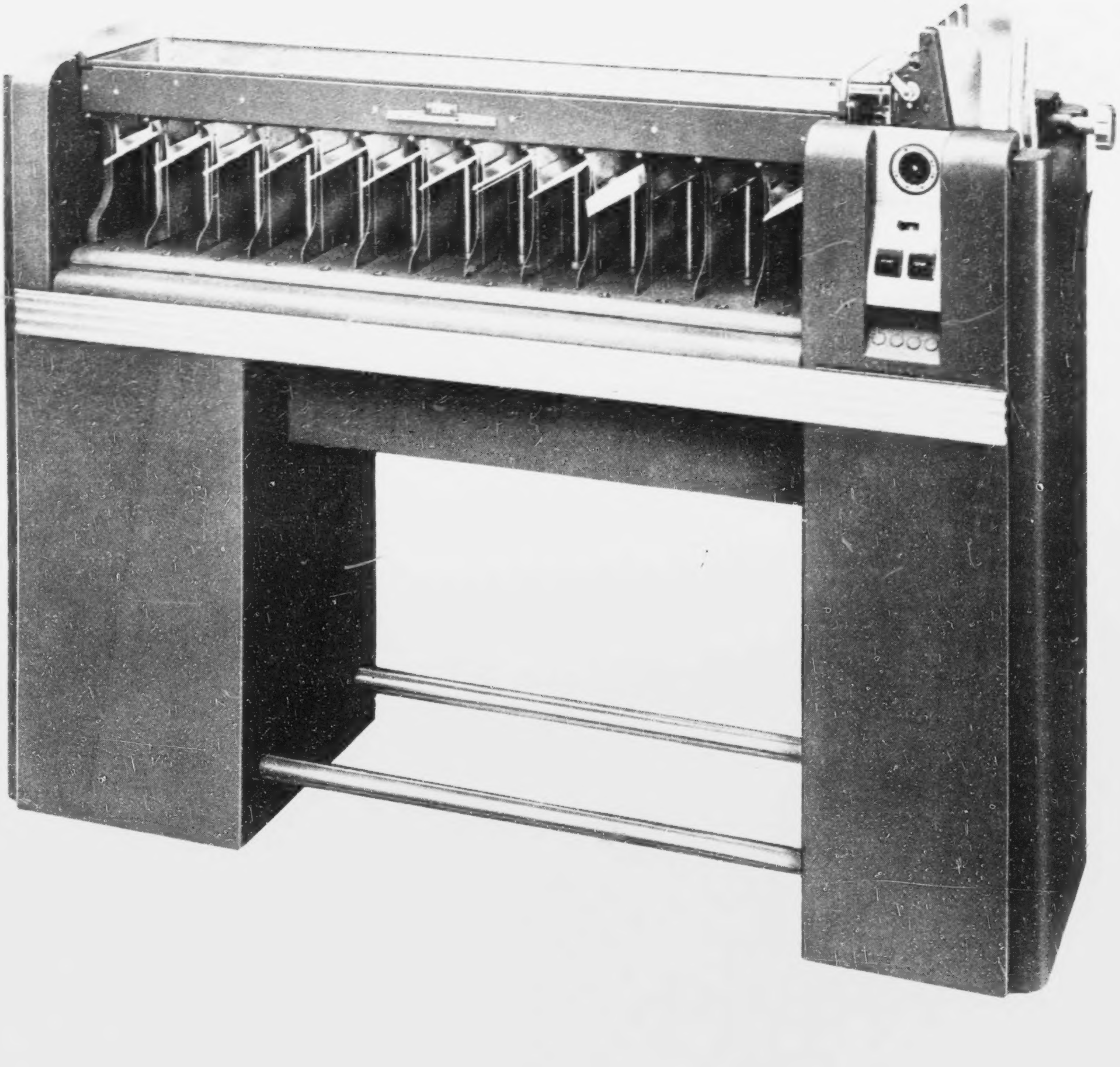
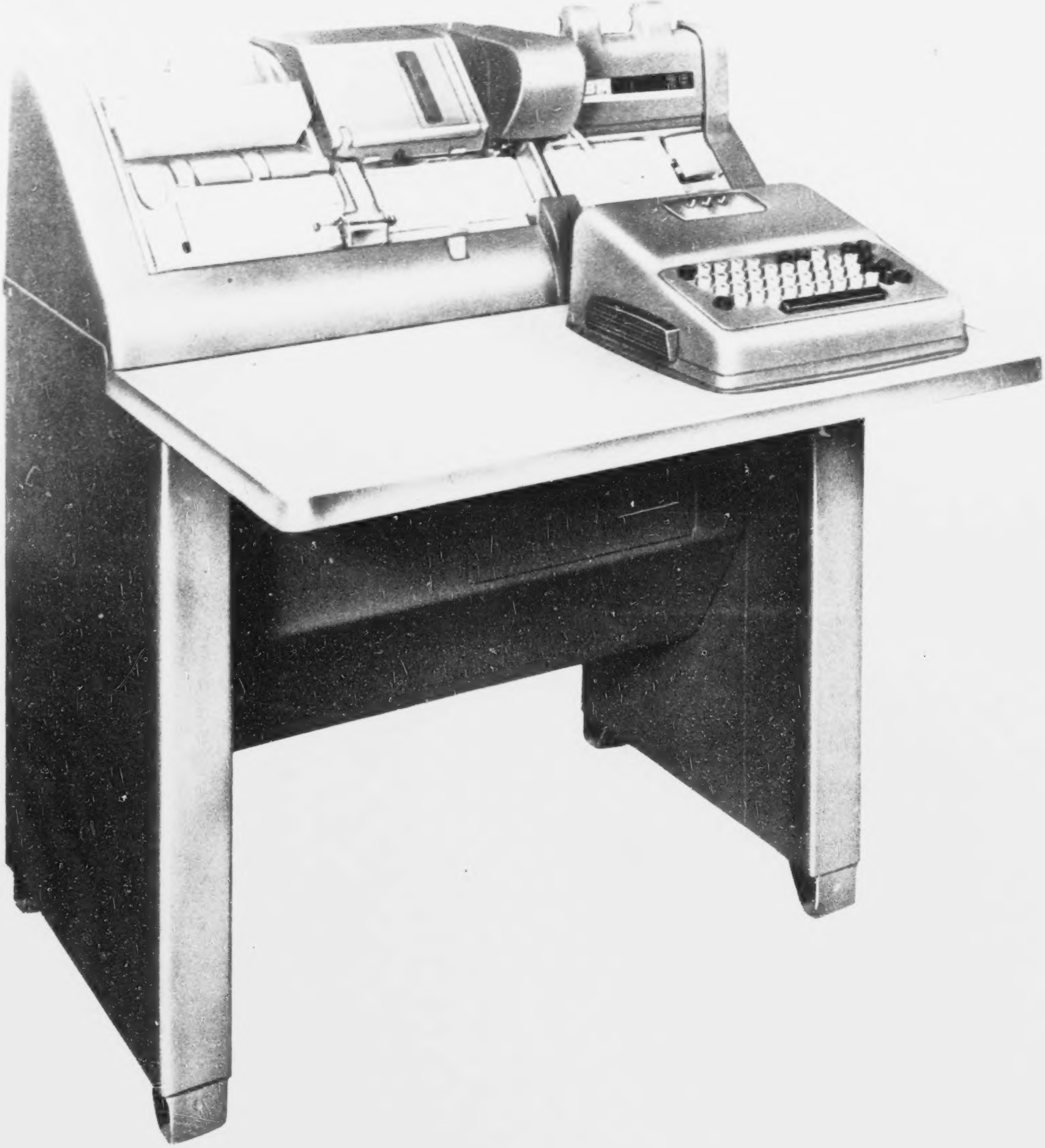
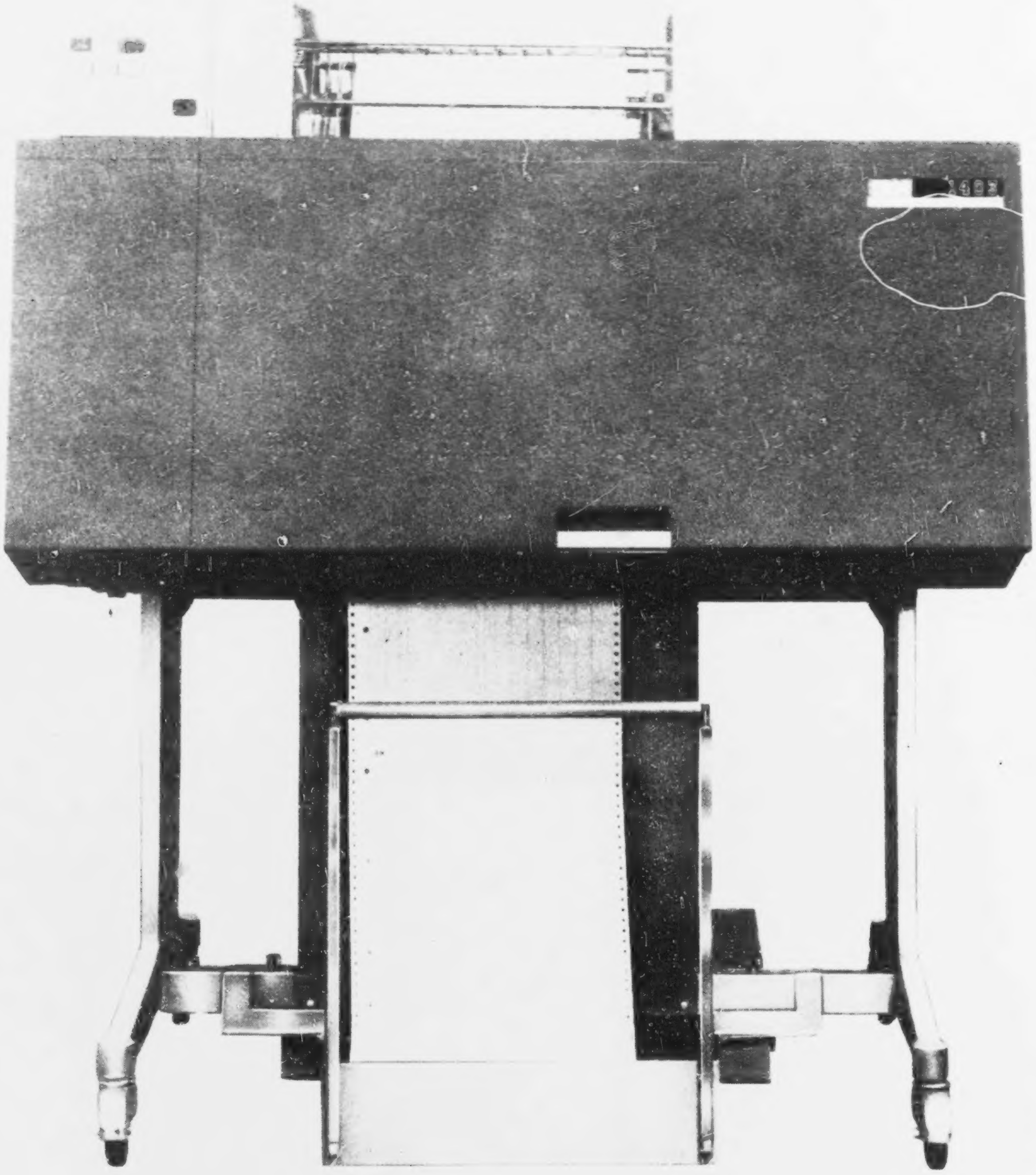


IBM 026 KEYPUNCH



IBM 1403 PRINTER



THE COLLATING ORDER OF THE IBM 1401 PROCESSOR

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SAMPLE PRINT-OUT MAINTENANCE RUN

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                            UNION A/C FILE MAINTENANCE  BATCH NO. 073  MAR 30, 1966


RECORD CHANGED                      ABRAHAM LINCOLN - A STUDY IN GREATNESS, PT 1,--   017MP6PC  LINE    LINE
                                    ABRAHAM LINCOLN - A STUDY IN GREATNESS, PT 1,--   017MP6PC  LINE    LINE
                                    THE ILLINOIS YEARS

RECORD CHANGEC                      ACCENT ON LEARNING                                030MP6PB  OSUTAL
                             49     ACCENT ON LEARNING                                029MP6PB  OSUMPD  OSUMPD

                                    ADMIRALS IN THE MAKING                            014MP6PC  NDC     NDC
                                       SHOWS THE TRAINING, SCHOOLING AND PHYSICAL CONDITION-
                                       ING OF MIDSHIPMEN AT THE ANNAPOLIS NAVAL ACADEMY.  IN-
                                       CLUDES DRILLS, STUDIES, PARADES, SPORTS AND DANCES.

RECORD CHANGED               59     ADVENTURING IN CONSERVATION                       014MP6PX  IU      IU

RECORD CHANGED               65     AFRICAN ANIMAL HUNT                               009MP6PX  UWF     UWF
                                       PICTURES THE AFRICAN JUNGLES.  SHOWS SCENES OF THE
                                       STRUGGLE FOR SURVIVAL AMONG THE WILD LIFE.

RECORD CHANGEC                      AFRICAN GIRL, MALOBI                              011MP6PC  ATLAP
                                    AFRICAN GIRL - MALOBI                             011MP6PC  ATLAP   ATLAP

RECORD CHANGED                      AGED LAND, THE                                    025MP6PC  IFB     IFB
                             63     AGED LAND, THE                                    025MP6PC  ATWOOD  IFB

                                    ALASKANS, THE                                     012MP6PC  PF      CFD
                                       USES GROUND AND AERIAL PHOTOGRAPHY TO SHOW ALASKA'S
                                       CITIES, INDUSTRIES AND PEOPLE.  DEPICTS HER CITY DWEL-
                                       LERS AS WELL AS INDIANS AND ESKIMOS OF REMOTE AREAS.

RECORD CELETED                      ALGEBRA                                           013MP6PC  JHP

                             62     ALGEBRA AN INTRODUCTION                           013MP6PC  JHP     JHP
                                       EXPLAINS THE NATURE OF ALGEBRA AND HOW IT DIFFERS FROM
                                       ARITHMETIC.  INTRODUCES THE CONCEPTS OF ALGEBRAIC
                                       STATEMENTS AND EQUATIONS.

                                    ALL ABOUT LIGHT                                   011MP6PX  CENCO   CENCO
                                       FROM THE DISCOVERING MATTER AND ENERGY SERIES.
                                       DISCUSSES THE SPEED OF LIGHT, HOW IT TRAVELS AND ITS
                                       MANY SOURCES.  EXPLAINS REFLECTION, REFRACTION, TRANS-
                                       PARENT, TRANSLUCENT, OPAQUE, SPECTRUM AND THE RAINBOW.

                      UR     55     ALPHABET IN BLACK, THE                            029MP6PB  NET     IU
                                       FROM THE MUSIC AS A LANGUAGE SERIES.
                                       SHOWS HOW THE BLACK KEYS ON THE PIANO CAN BE PLAYED
                                       ALONE.  DEMONSTRATES THAT THE BLACK KEY SCALE IS USED
                                       IN FOLK AND PRIMITIVE AS WELL AS MODERN MUSIC.

                      UR     55     ALPHABET IN WHITE, THE                            029MP6PB  NET     IU
                                       FROM THE MUSIC AS A LANGUAGE SERIES.
                                       SHOWS DIFFERENT COLORS AND TONAL QUALITIES OF VARIOUS
                                       WHITE KEY PIANO SCALES.  DEMONSTRATES TRANSPOSITION
                                       AND SHOWS THE GREAT VARIETY POSSIBLE FROM THE USE OF
                                       THE SEVEN WHITE PIANO KEYS ALONE.

                             52     AMERICAN PIONEER                                  020MP6PB  ALM     ALM
                                       EXPLAINS THE TYPES OF PEOPLE, MODES OF TRANSPORTATION
                                       AND VARIOUS PHYSICAL DANGERS IN THE PERIOD OF AMERICAN
                                       EXPANSION WESTWARD.  SHOWS THE BUILDING OF A FRONTIER
                                       FORT WITH PRIMITIVE TOOLS AND NATIVE LUMBER.

                             45     ANDES, THE                                        010MP6PX  KAMEN   IFB
                                       FROM THE SOUTH AMERICAN FILMS SERIES
                                       SHOWS HOW MOUNTAINS ARE FORMED AND DISCUSSES THE AN-
                                       DES' EFFECT ON CHILE'S CLIMATE, NATURAL RESOURCES AND
                                       COMMERCE.  INCLUDES SCENES OF THE TRANS-ANDEAN RAILWAY
                                       AND THE PAN-AMERICAN HIGHWAY.

                             55     ANDY AND THE LION                                 010MP6PX  WWS     WWS
                                       FROM THE PICTURE BOOK PARADE SERIES.
                                       AN ICONOGRAPHIC MOTION PICTURE BASED ON THE CHILDREN'S
                                       BOOK OF THE SAME TITLE BY JAMES DAUGHERTY.  TELLS THE
                                       STORY ABOUT A BOY WHO BEFRIENDS A CIRCUS LION AND IS
                                       IN TURN BEFRIENDED.

                             61     ANIMALS OF THE ICE AGES                           015MP6PB  HUBER   NOF
                                       SHOWS HOW SCIENTISTS EXCAVATE PREHISTORIC BONES IN AN
                                       OPEN-PIT MINE, IDENTIFY AND REASSEMBLE THE BONES, AND
                                       RESTORE THE ANIMAL TO ITS ORIGINAL APPEARANCE.

                      NIEM   53     ANY BOY - U S A                                   024MP6PX  WCTU    WCTU
                                       ''MISTER WHISKEY'' EXPLAINS THAT HE IS NOT ALLOWED TO
                                       PILOT A PLANE, DRIVE AN ENGINE OR STEER A SHIP ON THE
                                       HIGH SEAS BECAUSE HE LACKS GOOD JUDGMENT, STAMINA,
                                       AGILITY AND CLEAR THINKING.

RECORD CHANGEC               47     APPLICATION OF PASCAL'S LAW, PT 1                 012MP6PB  USN     DUART

RECORD CHANGED               47     APPLICATION OF PASCAL'S LAW, PT 2                 012MP6PB  USN     DUART

                             47     ARIZONA                                           010MP6PX  DPC     EBF
                                       FROM THE THIS LAND OF OURS SERIES.
                                       DEPICTS THE HISTORICAL, SCENIC AND INDUSTRIAL HIGH-
                                       LIGHTS OF ARIZONA.  SHOWS NAVAHO INDIANS AND THE AGRI-
                                       CULTURAL CROPS AND CLIMATE OF THIS AREA.

     EQUAL ERROR      ROCK   48     ARIZONA AND ITS NATURAL RESOURCES                 039MP6PC  USDIBM  OPRINT

                      ROCK   55     ARIZONA AND ITS NATURAL RESOURCES (2ND ED)        029MP6PC  USDIBM  USDIBM
                                       SHOWS AGRICULTURE, IRRIGATION, INDIAN LIFE, NATIONAL
                                       MONUMENTS AND COPPER-PRODUCING CENTERS OF ARIZONA.
                                       DEPICTS THE MINING AND REFINING OF COPPER.
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PERTing the Automated Catalog

Charles J. Vento

Audiovisual Instruction—*March 1966*

In a recent press conference, President Johnson ordered Administration officials "to immediately begin to introduce a very new and very revolutionary system of planning, programing and budgeting throughout the vast Federal Government."

The technique he discusses may or may not be specifically Program Evaluation Review Technique (PERT); however, the implication is obvious. Methods of planning and programing are available and necessary to establish objectives, controls, and guidelines desired when implementing projects.

Criticism of education and its related projects may often stem from the basic problem of planning. It is often too difficult for an administrator to explain a project in such a way that his audience fully understands the purposes and eventual results of his efforts.

During the last two years, Desmond L. Cook, professor at Ohio State University, has been studying and experimenting with the application of PERT to educational research and other problems. The technique is not new outside of education; NASA and the Department of Defense utilize it in various developmental projects, the most noted of which is the Polaris Missile Project.

Industry has used a similar technique, the Critical Path Method (CPM), and has found it valuable in building, construction, research, and development.

At present, educators are using PERT to assist them in construction programs, such as the junior college building programs in Cleveland, Ohio, and Bellevue, Washington.[1]

What Is PERT?

"PERT is a set of principles, methods, and techniques for effective planning of objective-oriented work. It involves establishing a basis for scheduling, costing, controlling, and replanning in the management of programs."[2]

Network: The basic design of the PERT System is a network which assists in defining project objectives. Individual tasks are specifically defined and can be visualized in a "work breakdown structure" that presupposes an end product which is at the highest point. (Work from the top down.) From the end product, each preceding "work package" is defined; that is, each event is broken down into its component parts

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[1] Dombrow, Rodger T. "How To Meet Your Construction Deadlines." *School Management* 7: 99-103; July 1963.

[2] PERT Coordinating Group. *PERT . . . Guide for Management Use.* U.S. Department of Defense, Document No. D1. 6/2: [illegible] 4/2. Washington, D.C.: Government Printing Office, 1963. 44 pp.

until the starting event and activity are established—the reverse process of the usual planning program. Once established, the event-activity breakdown is visualized into a network constructed in such a fashion that activities are illustrated in linear or parallel fashion. This merely indicates that certain activities must precede those following, and that certain other activities may run concurrently. No successor event can be considered completed until all of its predecessor events have been completed. All activities must progress toward the end objective. Therefore, no activity can be reversed, forming a loop, to a preceding event.

The two major devices used in a network are events and activities.[3] Events are specific, definable accomplishments, recognized at a particular instant in time. Events do not consume time or resources. However, activities involve time and resources which are required to complete a particular task. In the accompanying illustration of a network, events are represented as circles, and activities are represented as arrows. This is the usual procedure; adaptations using different geometric forms may be employed to fit specific needs.

Time Estimates: Following the construction of a suitable network which accurately establishes the flow of work (an excellent technique is to use 3" x 5" cards on a table before transferring it to paper) one can begin to determine time estimates needed to reach each event. In the PERT sequence, three time estimates are utilized to allow for the "measure of uncertainty" and for probabilities as work progresses:

1. Optimistic time—time estimated when everything can be accomplished if everything goes well—Symbol (a).

2. Pessimistic time—estimate applied to the longest period of time for completion under adverse conditions —Symbol (b).

3. Most likely time—estimate given for the most realistic time an activity might consume—Symbol (m).[4]

Calculating Time and Critical Path: The formula used to acquire the expected elapsed time (t_e), based on the activity variance which is a measure of the uncertainty when using three time estimates, is $t_e = \frac{a+4m+b}{6}$. The critical path is identified after calculating the t_e for each activity (computer programs are used in large complex networks). This is the path with the longest time sequence of events and activities, or the greatest negative or least positive slack, identified by another line following that path. To determine slack, which is the difference between the latest allowable date (T_L) and the expected date (T_E), the t_e of each path is summed T_E as one progresses along the longest path of the network. The reverse process is to subtract as one moves from end to start to acquire T_L along the shortest path of the network. The results when subtracted indicate positive or negative slack. Once slack has been calculated, one can determine trouble spots, thereby achieving a major function of planning with PERT. When critical areas are identified (no slack or negative slack), a person can increase his resources or revise his plans to accomplish his objective. Thus, PERT is dynamic in nature so that replanning cycles become a vital feature of the process. The PERT System requires constant updating and reanalysis so that effective management may be achieved.

Scheduling: The effectiveness of management within the PERT System results from the scheduled sequences of each activity. Once the time (T_L and T_E) calculations are made, a calendar is employed to establish earliest and latest starting dates for each activity. Daily calculations are based on a five-day, 40-hour work week (one day equals .2 of a week).

PERT Cost: After the network and scheduling are completed, responsible personnel develop cost estimates for each activity (work package), based on manpower and other resources required to perform the scheduled program.

Details of cost are more complex, and because PERT cost has not yet been applied to the accompanying example, it will not be discussed at this time.

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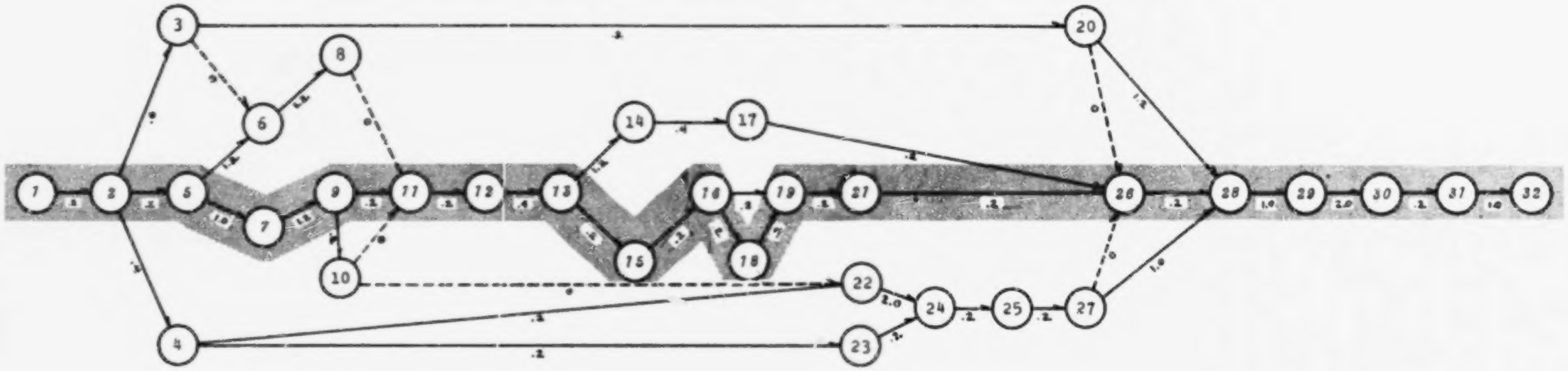
[3] Cook, Desmond L. *An Introduction to PERT*. Occasional Paper 64-156. Columbus, Ohio: Bureau of Educational Research and Service, Ohio State University, 1964.

[4] Miller, R. W. "How To Plan and Control With PERT." *Harvard Business Review* 40: 93-104, March-April 1962.

AUTOMATED CATALOG



EVENT		ACTIVITY
Pre.	Suc.	Description
1	2	*Print-our master title list from latest master tape.*
2	3	Establish catalog format and list department codes and grade levels.
2	5	*Mail title list - personal call for instructions on use.*
2	4	Develop subject matter outline.
3	6	Dummy activity.
5	6	Check master title list and mark according to department inventory. (Key punch directions).
5	7	*List missing titles*
6	8	Prepare call cards (Punch by computer programing).
3	20	Prepare programing for print-out formats.
4	22	Prepare call cards and interpret.
4	23	Key punch subject headings
7	9	*Compile data for materials not on the master list.*
9	10	Make call cards.
8	11	Dummy activity.
10	11	Dummy activity.
9	11	*Upgrade master tape.*
11	12	*Integrate new call cards and check alphabetical order.*
12	13	*Proof new list and make corrections.*
13	14	Compare and check for producer codes and hold applicable codes for department list.
13	15	*Compare master tape with department list for series references. Hold appropriate series and prepare tape.*
14	17	Check against producer cards - make needed correctionn.
15	16	*Prepare series title listing, call cards, title cards.*
16	18	*Check series cards against master tape, correct and upgrade.*
16	19	*Merge series cards with call cards (Dept.)*
17	26	Print-out - Producer codes.
18	19	*Integrate series in master tape (Dept.)*
19	21	*Check call cards against master tape.*
21	26	*Print-out master alphabetical list for department.*
22	24	File subject cards.
23	24	File subject headings cards.
24	25	Print-out a Subject list - Proof corrections.
25	27	Print-out final subject list.
20	26	Dummy activity.
27	26	Dummy activity.
20	28	Prepare foreward and table of contents and other information.
27	28	Graphic arts production.
26	28	*Final catalog design.*
28	29	*Photo reproduction process.*
29	30	*Offset printing - Binding.*
30	31	*Deliver catalogs to department.*
31	32	*Prepare and deliver to schools.*

Automated Cataloging Process

The network shown is one solution to the events and activities needed to develop an instructional materials catalog. This process is the result of experimentation during the Automated Cataloging Project, which involves studying possibilities of programing computers for the cataloging process.[5]

As calculated on this network, the total time estimate to complete a catalog from start (request) to delivery to a teacher is 8.8 weeks. Of this time, approximately four hours is all that is utilized to accomplish the electronic data processing function. For simplified calculation of time, .2 or one day was allotted to each computer function. It would seem that resources may be applied to activities along the critical path as long as positive slack is available, thereby reducing the overall time for completion of the project.

The circles and arrows only show more important events and activities. Subroutines are not shown but are considered when estimating time to completion.

Summary

With increased amounts of money available to education, it is imperative that proposals for these funds be accompanied by a definitive outline indicating the function of management, which includes the PERT technique or something similar. Too often, R and D funds are allotted without the faintest notion of a well-defined plan. PERT graphically defines a project in a simplified language understandable to all. Although complex, PERT is not difficult to implement and does recognize the difficulties when attempting to plan for the future.

Because it is dynamic, PERT requires constant updating and replanning. This is one of its greatest assets. With PERT, educators would be capable of giving the layman a comprehensive explanation of projects whether in building schools or research and development projects.

---

[5] Southern California Automated Cataloging Project of the Department of Health, Education, and Welfare, Office of Education, Title III and VII. The chief investigator is Glenn McMurry.

REFERENCES

1. Cook, Desmond L. *PERT Applications In Education.* Preliminary draft of a manuscript submitted to United States Office of Education. Columbus, Ohio: Bureau of Educational Research and Service, Ohio State University, 1965. 171 pp. A monograph will be published based on this draft, which will serve as an excellent guide to the use of PERT as it applies to education.

2. Dombrow, Rodger T. "How To Meet Your Construction Deadlines." *School Management* 7: 99-103; July 1963.

3. Geisler, M. A., and Steger, W. A. "How To Plan for Management in New Systems." *Harvard Business Review* 40: 103-10; September-October 1962.

4. Hansen, B. J. "Practical PERT, Including Critical Path Method," appearing in the paperback publication *America House;* November 1964. 191 pp.

5. International Business Machines. *General Information Manual PERT.* IBM, Bulletin No. E20-8067-1. White Plains, N.Y.: IBM, Data Processing Division, n. d. 28 pp.

6. Levy, Ferdinand K., and others. "The ABC's of the Critical Path Method." *Harvard Business Review* 41: 98-108; September-October 1963.

7. Miller, R. W. "How To Plan and Control with PERT." *Harvard Business Review* 40: 93-104; March-April 1962.

8. PERT Coordinating Group. *PERT . . . Guide for Management Use.* U.S. Department of Defense, Document No. D1. 6/2: P94/2. Washington, D.C.: Government Printing Office, 1963. 44 pp.

9. PERT Orientation and Training Center. *PERT Fundamentals.* (Programed Instruction Format). U.S. Department of Defense, Document No. D1. 2: P94/6, Networking 1, Scheduling and Planning 2, Workbook and Examinations 3. Washington, D.C.: Government Printing Office, 1964.

10. School Management. "How CPM Works for a School District." *School Management* 7: 104-105, 138, 141, 143, 145; July 1963.

STEPS FOR CONVERTING TO THE AUTOMATED CATALOGING SYSTEM

1. User Procedure
   - a. Determine your department needs.
     - (1) Be sure of the titles needed. (It's a good idea at this point to discard out-dated materials. This saves time and reduces the size and also the cost of your catalog.
     - (2) Decide on your order number. (The media code is already available. Your number should be meaningful and not exceed 8 digits.)
     - (3) Decide on the grade levels needed.
     - (4) If a subject matter listing is desired, prepare the subject matter outline at this point or in the near future.
   - b. Obtain a master title list from the catalog service center.
   - c. Indicate on the list the titles that you own.
     - (1) Look carefully for the film title. Look for any sub-title that you may have, if the file is not listed as you expected it to be. Computer alphabetizing is slightly different, so search diligently for your title. (Example: "City, The" comes after all titles beginning with "City," such as "City at Night" or "City Wants Help." Nothing comes before something and each space counts. The order is generally as follows: nothing, symbol, letters, numbers.)
     - (2) When you find the title, check the length and the producer codes. Be sure that they coincide with yours. If the length is off a few minutes, do not be concerned. If it is off a

great number of minutes, it should be called to the center's attention. Many titles are issued in several lengths.

(3) Add your call number to the extreme left of the title.

(4) After the call number, add the appropriate number or letters representing your grade level needs. Use "1" for Primary, "2" for Intermediate, "3" for Junior High School, "4" for Senior High School, and "5" for College. Use the letter "T" for Teachers Education. "A" for Adults, and "S" for Special Education, meaning handicapped or blind, etc. (You may mark any special group of films you wish and indicate in your appendix what the "S" means.)

Examples: See Note

A "1 2" indication means primary through Intermediate.

A "2 4" indication means Intermediate through Senior High School and Teachers Education.

A "1 3" indication means primary through Junior High School and Teachers Education.

A "4 5" indication means Senior High School through College and Adult.

A "4" indication means Senior High School only.

NOTE: Circle the number for the most appropriate level if desired.

(5) Check your stock, or color code. Circle if incorrect, or slash it and insert a "B" "C" or "X," (meaning that it is available in both black and white and color.)

d. Use the special form supplied by the project staff for reporting titles not on the master list.

e. Make preparation for a subject matter listing if desired.

   (1) Determine approximately how many times titles are used in the listing, and report this to the service center. (If the exact number of times a title will be used is known in advance, you may place that number at the extreme right of each title as you mark the master title list.

   (2) Decide what information you wish to appear in your subject listing. You may have title only, or title with any of several choices of materials, such as number, grade level, time and stock indication, etc. (In general, because of limitations on line length, only two given items may appear in addition to your title and one of these should be your number.)

f. Punch your own call cards, or return the listing to the project center for call card punching.

2. Cataloging Service Procedure

   a. Necessary new records will be added to the master tape and call cards made for them.

   b. Subject matter heading cards will be punched and duplicate call cards prepared for use in filing a deck to be used to print-out the "Subject Matter Listing." (This filing may be done at the center but it is usually preferable for the user to do this as often refinement of the outline is accomplished at this point, and it is not too late to add or omit subject matter headings.)

   c. When all the above steps have been completed, the computer can in a matter of minutes, produce a two-column print out of a subject matter listing, an alphabetical listing, and a list of all producer and distributor codes used in your catalog with their meanings.